



# Understanding Thriving Communities

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This report was commissioned by the National Lottery Community Fund. Research to support this report was undertaken between May and August 2019, as a joint project between the What Works Centre for Wellbeing and Happy City. The report was authored by Saamah Abdallah,

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# EXECUTIVE SUMMARY

## What enables people and communities to thrive?

The National Lottery Community Fund (the Fund) supports people and communities to thrive. As part of a journey to find out what enables people and communities to thrive and the conditions for success, the Fund commissioned a project to identify what is already known about what works and what we don't yet know. This report is the main outcome from that project.

This has been commissioned at a time where there is growing interest across government, civil society and business of the importance of broader measures of success, which take us beyond looking at purely economic outcomes and that capture how we feel about our lives and how we are doing collectively as a society. In support of this interest, there is an increasing body of literature in this area from multiple academic disciplines including psychology, sociology and economics. This research draws on an increasing supply of data resources, both qualitative and quantitative, which are capturing what matters most to people and places from diverse perspectives. As such, this is an opportune time to consolidate this knowledge base, which can feel quite disparate, in a way which identifies the importance of taking a comprehensive approach to understanding people and communities. By identifying the major gaps in knowledge, we can also support more strategic research to be conducted in the future.

In 2018, as part of a refresh of the strategic framework, the Fund developed a conceptual model of Thriving Communities, shown below. The Fund's model provides the structure for organising the existing evidence and gaps.

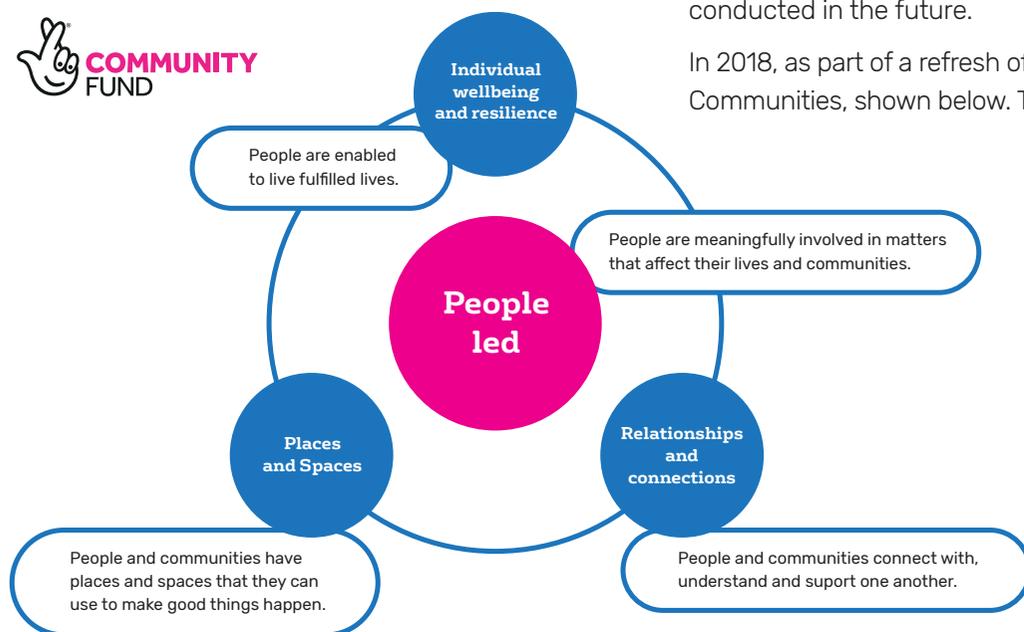


Figure 1: National Lottery Community Fund model of thriving communities

The project used: a pragmatic literature search and review approach; resources submitted by our academic advisors; the combined knowledge and research of What Works Centre for Wellbeing and Happy City; and new quantitative data analysis using the Understanding Society data. It provides:

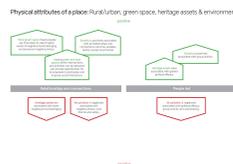
- a summary of what the evidence tells us about factors and interventions that influence a community’s capacity to thrive, based on the themes described in the model
- insight into where there are gaps in the evidence and refinements that can be made to the conceptual model to inform future work. Such insight is intended to be used by the Fund to support the communication, use and refinement of the model to help to guide both funding and evaluation processes. Throughout the report, where we highlight an evidence gap, you’ll see this icon



## This report is accompanied by



- **Understanding Thriving Communities Measures Bank** (excel file) - complements this report provides a resource for the Fund to use with grantees to select the particular questions which further test the relationship between specific determinants and outcomes, and as such supports how the evidence presented here can be tested by projects in practice.



- **Places and Spaces visual summary** (PDF) - this offers a different presentation of the data in section three: a focus on places and spaces.



- **Funding officer briefings: community events and community assets** - (PDF) - to increase the applicability of the report findings for NLCF funding officers, these pilot case study briefings pull the most relevant evidence and offer specific recommendations and examples.

## A pragmatic interpretation of a complex question

The Fund's model identifies four thematic areas associated with thriving:

1. individual wellbeing
2. relationships and connections
3. places and spaces
4. people in the lead.

The relationships between these different themes is represented, above, in the diagram of the model as connected bubbles, which orbit the fund's central value of being people-led.

To identify these relationships, it was necessary to explicitly identify and distinguish between outcomes and determinants.

Outcomes	Determinants
indicators that constitute the end goal of thriving communities, e.g. Strong social cohesion	factors or interventions that have an impact on the outcome areas, but are not the end goal in and of themselves, e.g. Existence of green spaces

We took a pragmatic approach to interpreting the model and identified three separate outcome themes. These communicate what the Fund sets out to achieve through its activities and funding:

1. Improving individual wellbeing.
2. Strengthening relationships and connections.
3. Putting people in the lead.

### For each of these themes, we identified the following:

- **Associated outcome indicators** that could measure improvements or declines in these outcome areas. These would also signify whether the goal of thriving communities is being achieved.
- **A range of determinants; the factors and interventions that have an effect on those outcomes.** The interventions include projects, programmes and approaches which could be adopted by the Fund and its grantees, based on the evidence of their effectiveness.
- **The Places and Spaces theme as a collective description of a set determinants** that can affect any, and all, the three outcome themes.

“ We reviewed the evidence on the relationship between different conditions, factors or interventions that can have an impact on the extent to which a community can thrive.”

In practice however, these themes do not perfectly fit the available evidence, nor provide an uncontentious understanding of what a thriving community is and how it can be supported, see below for important limitations of the evidence.

This summary and the full analysis provides the existing evidence on what can affect a community's ability to thrive, based on the Fund's thriving communities model. This has been developed to:



- help inform the Fund's understanding and decision-making
- communicate the different aspects of communities that are important to recognise
- Identify the breadth of factors and interventions that are worth considering in the development of projects and programmes.

By presenting the evidence in this way, we can communicate what we know works already, in a way that is useful. But this is not a complete representation of everything that can work to enhance communities, evidence gaps remain significant, nor does it capture the complexity and dynamics of communities, nor how to account for the specificity and context of different communities.



### Important limitations of the evidence

We recommend that any communication and interpretation of the Fund's model and the findings included in this report is complemented by an appreciation of these limitations and the complexity and context dependency for communities to thrive.

**There are significant overlaps between the three different outcome areas.**

**The outcome areas do not include or distinguish between certain aspects of wellbeing that we might expect to see in such a model.** For example, the current model does not currently recognise the value of pleasure and happiness for individual wellbeing, particularly relative to negative experiences.

For relationships and connections, the fund's model doesn't distinguish between close relationships we rely on and those which are more about social interactions. Within each theme, there is a further need to clarify what is included and why. The people-led theme in particular would benefit from some further conceptual work, which recognises its relevance as an approach and as a determinant for other outcomes as well as representing an outcome for communities that thrive.

**It is not possible to create a clear theoretical or observable distinction between a determinant and an outcome across the whole model.** The reality is a much messier, complex system: one where determinants and outcomes can be interchangeable, and self-reinforcing.

**The relationship between determinants and outcomes is complex.** Even where we find that changes in factors can be associated with changes in outcomes, the size of the associated change in outcomes may be larger or smaller depending on the starting point. For example, changes in income are associated with ever smaller

changes in individual wellbeing, the more money you have. In practice, outcomes in complex systems will also be dependent on a range of different factors. Any combination of these factors can be changing at any point in time. Some of these factors will enhance and support the effects of positive determinants (protective factors), and some act against them (risk factors). It is likely that to achieve measurable change would require a confluence of positive factors work together, with sufficient critical mass to establish sustainable improved outcomes for a community.

**The evidence that connects determinants to thriving community outcomes must be also complemented with an understanding of a local context.** For example:

- who lives there
- what resources and capacities are available
- what activities have already been successful and for whom.

Further work could consider developing a way to model this explicitly, to understand thriving in different places and contexts.

**It is complex to define community, and at what level this model should be applied.** Communities take many different shapes and sizes. They can be defined geographically, or be based on shared interests. They can organically appear and disappear over time. For the purposes of this research, we have interpreted communities to be place-based, in line with the emphasis in the model from the thematic area of places and spaces. But there are no clear and consistent parameters that can be applied to place-based communities. From streets and neighbourhoods, to countries and countries, identifying the level of community of interest will have an important impact on how to interpret the evidence on what matters for communities. For example, it makes sense to think about economic planning for large communities, but perhaps less so for small ones.

**There are determinants that lie beyond the community,** no matter at what level of community is being explored. They range from government policy, to climate to the global economy.

## **Evidence findings**

Below is a brief summary of some of the key findings from this review, where there is evidence of the relationship between determinants and outcomes. The table demonstrates the circularity and interconnectedness of the different outcome themes and the relationships between determinants and outcomes, together with a commentary of the associated indicators available.

Table 1: Summary of findings from the evidence review

Outcome theme – what is a thriving community	Determinants – what makes a thriving community?	Comment on the evidence base and measures available
<p>Individual wellbeing – How we are doing as individuals, commonly measured by subjective wellbeing questions, including life satisfaction, happiness, worthwhile and anxiety</p>	<ul style="list-style-type: none"> <li>- Physical and mental health</li> <li>- Education and learning</li> <li>- Financial security</li> <li>- Work/meaningful activity</li> <li>- Close and supportive relationships....</li> </ul>	<p>There is good evidence linking individual subjective wellbeing outcomes to individual characteristics and experience. This is particularly thanks to an increased use of individual wellbeing questions in surveys and evaluations, including for example the Annual Population Survey (ONS)</p>
<p>There is good evidence linking individual subjective wellbeing outcomes to individual characteristics and experience. This is particularly thanks to an increased use of individual wellbeing questions in surveys and evaluations, including for example the Annual Population Survey (ONS)</p>	<ul style="list-style-type: none"> <li>- Area characteristics: demographics (for example, age and ethnicity), inequality, deprivation</li> <li>- Satisfaction with the area</li> <li>- Design of the environment (including green and blue spaces), services and accessibility</li> <li>- Local expenditure of community development</li> <li>- Air pollution</li> <li>- Sense of belonging</li> </ul>	<p>There is growing evidence, including the quantitative analysis conducted for this project, that measures the quality of relationships and connections, such as those included in the Community Life Survey (DCMS). There is an important complement to the existing literature on what works to build social capital.</p>
<p>People led – Political efficacy, volunteering, civic engagement</p>	<ul style="list-style-type: none"> <li>- Individual characteristics: education, age, income gender, relationship, having children, working hours and personality</li> <li>- Area characteristics: demographics (such as age), deprivation</li> <li>- Resident turnover</li> <li>- Group activity</li> <li>- Involvement of people in local decision making</li> <li>- local amenities: more schools, educational facilities, heritage assets and locally owned businesses</li> <li>- Air pollution</li> </ul>	<p>There are less well established evidence and measures that tell us what works to strengthen the people led outcome. There is ambiguity about whether this is better described as a determinant. Additionally, it is not clear what level of participation, engagement and leadership constitutes a thriving community, and is instrumental for other outcomes. We also do not have evidence to distinguish between individual leadership capabilities and experiences of leadership at the collective community level.</p>

The evidence base for what works to increase, or decrease, wellbeing is shown below. The coloured boxes show interventions, while the outline box shows factors and conditions. Evidence gaps are listed for each topic area.

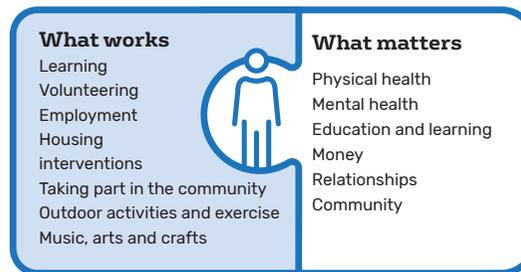
It is important to remember that an intervention or factor not shown is not necessarily ineffective, just that no high quality evidence exists for it.

## OUTCOMES

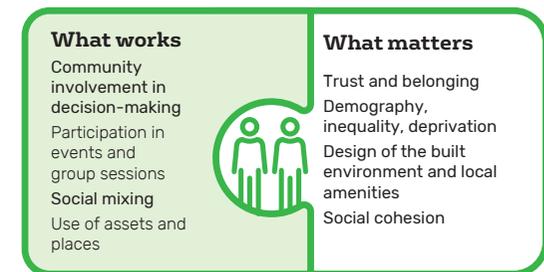
### People-led outcomes



### Individual wellbeing outcomes



### Relationship and connection outcomes



## GAPS

Who leads:

- what is the role of the 'civic core' (those routinely engaging in volunteering, charitable giving and civic participation) in engaging thriving communities?
- what does inclusion mean in the thriving communities model, and how should it be measured? (bonding vs bridging capital).
- what enables inclusion in communities?

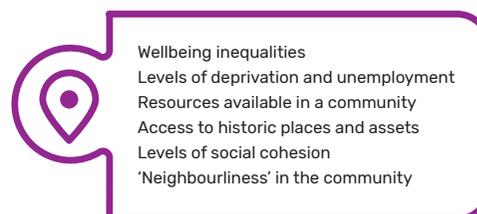
- What is meant by resilience, and how should it be measured to understand thriving communities?

- What factors need to be in place to enable 'social bridging' (meaningful social mixing)?
- What has to be in place for increased social connections to result in bridging capital within community-led projects?
- Why is air pollution associated with poorer social capital outcomes?

- Are there specific places and spaces that encourage civic activity?
- Are some spaces and places more enabling of thriving communities than others?
- Current lack of clarity on what is meant by 'access', 'opportunities', and 'services'.
- Do people's social capital outcomes change when they move to places that have more conducive local conditions?

## DETERMINANTS

### Places and spaces



## **Context is vital**

The quantitative analysis adds to our understanding by looking at the effects of determinants on both relationships and connections, as well as People led outcome indicators. This demonstrates where there are natural complementarities or conflicts between the different outcome themes.

## **Deprivation and schools**

For example, the findings reveal that income deprivation and air pollution have a consistent negative relationship across the themes. At the same time, number of schools and education bodies per capita, and a higher proportion of the population over 65, have consistently positive relationships.

However, further interrogation of the data finds that a higher number of schools only has a positive impact when the level of deprivation in an area is low, highlighting the importance of considering context in our interpretations of all these results.

## **Ethnic diversity and local authority expenditure**

In contrast, ethnic diversity shows up as positive for people led outcomes, but negative for all relationships and connections outcomes.

The analysis found that the negative effect on the outcome indicators of neighbourliness and neighbourhood belonging is greatly reduced when local authorities' expenditure on community development is high. When this is the case, the difference in perceived neighbourliness between ethnically diverse areas and those that aren't becomes minimal.

What's more, local authority expenditure appears to make little difference in areas that have low ethnic diversity. These findings are significant and we can take action based on them. This could be, for instance, by stressing the importance of targeting community development investment in areas that have low social capital because of their ethnic diversity. But it could also be in recognising the interactions between different factors and interventions and how projects and programmes should be designed with the breadth of factors and conditions in mind.

## **Relative impacts of different determinants**

The quantitative approach also identifies the relative impact of different determinants on specific outcomes. For two of the four outcome variables for relationships and communities, local authority expenditure has the largest effect size of all the variables tested in the model, while greater resident turnover has the biggest effect on two of the four people led outcome variables. It should be noted however, that effect sizes for all determinants are very small, given the multitude of factors that can affect the outcomes, so any difference in effect sizes should be interpreted with caution and with complexity and context in mind.

Figure 2: Most important determinants of those tested for each of the eight different thriving community outcomes



“ The evidence provides a boost for place-based organisations that are seeking to make a difference to communities. This is because beyond the underlying conditions in a place, how it is built and what it looks like, the research identifies changes and interventions in places and spaces that can strengthen communities. ”

## Focus on places and spaces

The evidence reviewed demonstrates that places and spaces matter for a community's likelihood to thrive. Determinants included in the places and spaces theme include:

- the socio-economic status of the local population
- the quality of infrastructure and services
- how we use the spaces around us

## Placed-based interventions that can support communities to thrive

- **Taking part matters:** this can be in terms of getting involved in community activities that can affect both physical and mental health; taking part can also help people to increase their skills. Activities that take place in community hubs or heritage buildings or places can improve a sense of belonging and pride. They can also help people to connect to others, which can particularly help in terms of building trust and self-confidence.
- **Community hubs** may improve trust, pride in the local area and social cohesion by bringing together different groups.
- **Community engagement in decision making** can directly impact on wellbeing, when done well. It can also help to build social networks and improve social cohesion.
- **Volunteering** has an impact on physical and mental health, as well as a sense of identity and purpose. It can also help people to build their social relationships and encourage people to continue to volunteer in their communities.
- **Learning** can help people to build confidence, a sense of purpose and help people to progress.
- **Music, arts and crafts activities** can create the conditions for wellbeing. They have been found to have a positive effect on mental health, as well as helping some groups to improve their self-esteem, and others to share their experiences and feel a sense of purpose.
- **Outdoor activities and exercise** have been found to have an impact on mental health.
- **Housing interventions** can have a positive impact on physical health, mental health and housing stability.
- **Employment** support that helps people to find work through high quality information and support, as well as working with employers and providing in-work support can help progression and retention.
- **Urban renewal** can lead to increased social connections, as can community development projects (which may have a physical presence).
- **Changes to green and blue space:** can help to promote social mixing and people participating in meaningful activities with others.
- **Funding in local areas** can make a difference: investing in community development can affect relationships and connections outcomes – particularly in terms of perceived neighbourliness and neighbourhood belonging.

## How can the Fund use this evidence?

- The findings can be used to continue conversations within the Fund and with potential grantees about what is meant by thriving communities. The evidence that we have presented in this summary and the longer report has started to bring to life the Thriving Communities Framework that The Fund hopes to use, based on a review of the current evidence base.
- The Fund may wish to share the findings on what can affect thriving communities that have more comprehensive evidence within teams and with grantees to be used in decision-making processes, as well as to highlight the evidence gaps. For this step, it is important to bear in mind the complexity and contextual aspects not adequately captured by this model.



### Evidence gaps

This project has identified some of the most important evidence gaps, organised into two main areas, which the Fund could consider exploring.

1. **Outstanding questions with respect to the model for thriving communities.** This recognises the importance of systems thinking in any approach to communities and the interactions between different factors. Further research in this area would strengthen both the conceptual understanding of the complexity of thriving communities, and provide a more realistic approach to understanding where and when interventions are likely to have most impact and in what combinations and sequencing.
2. **More specific questions about what works for who, when and where to support communities to thrive.** These questions could be answered by a range of research methodologies, including those which make the most of the Fund's current project portfolio, through the evaluation of a range of projects intervening in these areas with different beneficiaries. The Fund is well placed to commission further research which builds on its internal experience and expertise and which also tests evaluation and research approaches when identifying thriving communities as the key outcome.

The measures bank which complements this report provides a resource for the Fund to use with grantees to select the particular questions which further test the relationship between specific determinants and outcomes, and as such supports how the evidence presented here can be tested by projects in practice. Such measures should be used in line with programme or project theories of change to gain a deeper understanding of progress towards outcomes and components of Thriving Communities and have been derived from a review of questions that are currently being used in surveys and evaluations to measure different aspects of thriving communities and which in turn are supporting the growth of evidence of what works in this area.

## Next steps

The Fund's mission to support communities to thrive is complementary to many other organisations and individuals that seek to enhance outcomes for people and places. As such, the evidence presented in this report is likely to be of interest beyond the Fund, across government, the private sector and civil society.

This report provides a useful consolidation of what we know in one place. It also articulates the circularity and complementarity of different determinants and outcomes. Different actors can identify the determinants that they can influence: whether policy makers tackling poverty deprivation at the national level; or small businesses seeking to improve their footprint on local neighbourhoods. It recognises that all these factors interact and are dependent on local context. This report can therefore provide both a resource to improve the knowledge base of a diverse range of actors, as well as s bringing together these actors around a shared goal and understanding of what's important for people and places.

The research presented here remains patchy and limited, with respect to informing decision making for specific projects or policies. As this is based on existing evidence, there is also little that is likely to surprise the reader or inform a change in a current decision or direction. However, it serves a valuable purpose in providing a stock take that can go on the drive and inspire future research that does seek to answer some of the more complex and dynamic questions of what works for communities to thrive, in a way that is relevant to a diversity of stakeholders.

# 1. BACKGROUND, MODEL AND APPROACH

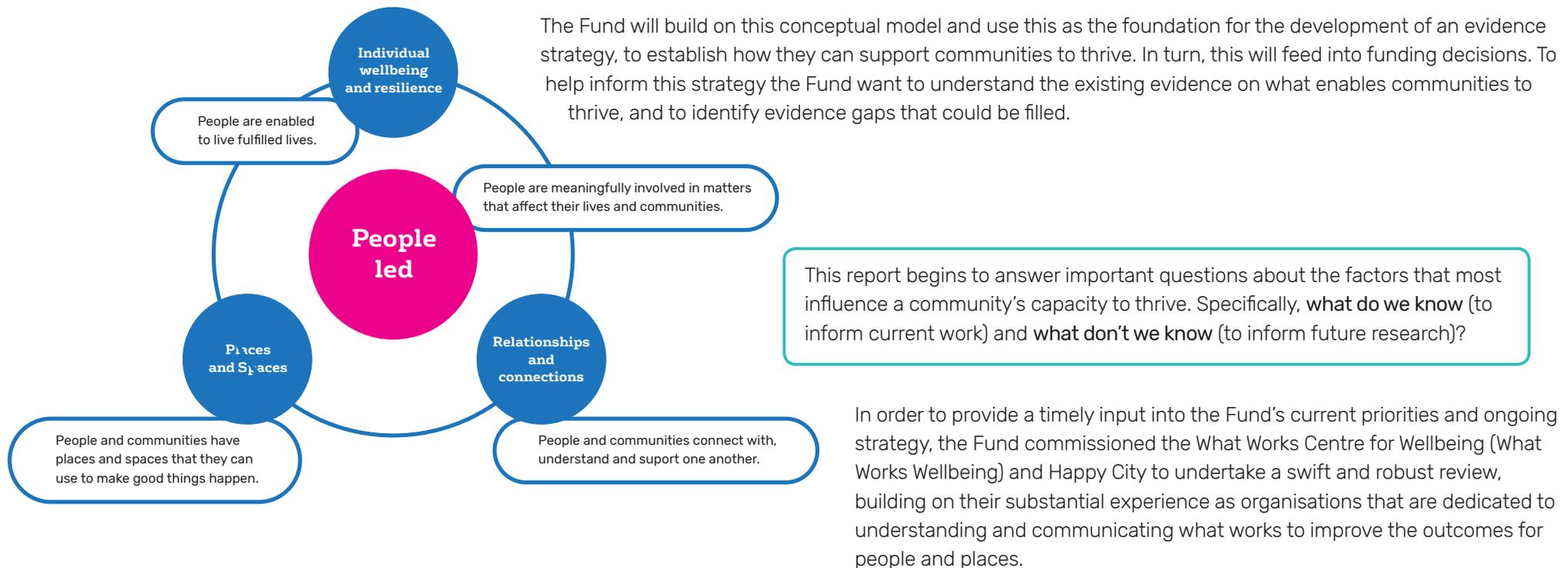
## 1.1 The purpose of the project

The National Lottery Community Fund (the Fund) supports people and communities to thrive. They are the largest community funder in the UK and distribute funds raised through The National Lottery to communities across the UK. Their purpose is to support people and communities to thrive. Last year, the Fund refreshed its strategic framework, and developed a conceptual model of what constitutes a 'thriving community', as presented in Fig. 1.

The Fund's model identifies four thematic areas associated with thriving communities as per figure 1 below: individual wellbeing, relationships and connections and places and spaces, orbiting the fund's value of being People led.



Figure 1: National Lottery Community Fund model of thriving communities



### **This report draws on:**

Five years of research undertaken by What Works Wellbeing and its many partners on the evidence base for wellbeing, including a range of systematic reviews. These provide a comprehensive analysis of wellbeing science to date in certain areas and research on community wellbeing metrics.

- The ten years of development of Happy City's Thriving Places Index and Community Pulse, both involving extensive consultation, with academics, policy makers and citizens, into the factors most influencing our collective capacity to thrive.
- The Fund's own internal review of evidence.
- Input from a high-level advisory group and specialist consultants to provide additional quality assurance.

Working with the Fund's model, we defined communities to be thriving where:

- People have high levels of individual wellbeing
- There are strong and quality relationships and connections between people
- People are empowered to take the lead within their communities

These are the three outcome themes we will be using for the rest of this report. For each outcome theme, we have identified outcome indicators which provide information on whether these outcomes are being achieved (see Appendix 1). These indicators have been derived from the narrative description of each outcome theme from the Fund's model and the research team's interpretation and understanding of the evidence base.

The mapping of the outcome indicators allows us to be more specific when identifying the particular dimension of thriving communities that the different determinants have an effect on.

## 1.2 Approach, challenges and limitations

There is no simple measure or set of measures for defining Thriving Communities. It is not straightforward to identify a widely agreed set of outcome measures and how they are affected by each different determinant. Communities are complex diverse systems with many interrelated social, economic and environmental factors affecting the people and places where we live and work in a number of different ways.



### Evidence gaps and complexity

- i) *The number of inter-related elements and dependencies means that simplification holds real risks, while over-complication can lead to inaction.*

The existing evidence base is inadequate to measure the complexity of factors that constitute the outcome of thriving communities and the determinants that affect communities fully. Similarly, these complexities do not lend themselves to the development of a single meaningful model that can be used to inform action.

We have designed a pragmatic approach in this project to allow us to identify and articulate relationships between determinants and outcomes as presented in the literature.

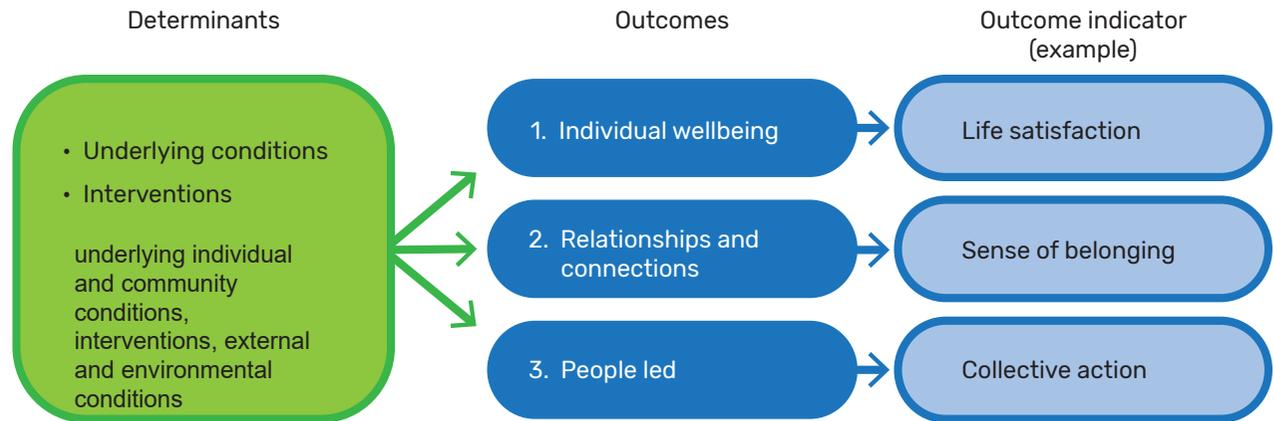
### Outcomes and determinants: where the Fund can have greatest influence

- ii) *Distinguishing between **outcomes** (which signify and capture the ultimate goal of achieving thriving communities), and **determinants** (which are factors or interventions that can have an important impact on the outcome areas we are interested in, but are not an end in and of themselves).*

We test the effects of different independent variables, or determinants, on these outcomes. In our analysis, we distinguish between underlying conditions – such as the demographic make-up of a place – and interventions that are actionable, such as the establishment of a new community hub.

We have also identified the determinants that appear in the literature review that relate to the theme of places and spaces, in order to present a summary of what can be done from a place-based perspective to enhance all three outcome areas for thriving communities.

Figure 2: Determinants and outcomes for the evidence review and quantitative analysis



“ We recommend that any communication and interpretation of the findings included in this report is complemented by an appreciation of complexity, evidence gaps, and context dependency.”

This review focused on the factors that, according to the existing evidence base, have been found to be important. It identifies the relative strength of their influence on different outcomes, the inter-relationships between them and the most pressing gaps to be filled in the evidence landscape.

### 1.3 Getting the most from this report

This report is part of the Fund’s ambition to measure and understand the ‘golden thread’ of factors that support thriving places, in order to support grantees to better understand, measure and improve wellbeing for the individuals and communities they serve through the design and implementation of their programmes and projects

**The analysis shared in this report adds significantly to our understanding of the known factors contributing to thriving communities,** to inform current strategies. But the findings should be interpreted with caution, recognising the significant gaps in the evidence base as well as the importance of systems dynamics and local context specificities that have an important impact on outcomes, but that are not captured here.

**This report is not a comprehensive representation of everything that affects thriving communities: significant evidence gaps remain.** For example, we did not include indicators that measure individual resilience, although it is included in the Fund’s model alongside individual wellbeing. This is because there is still a lack of good quality measures, and indeed consensus on how to measure it.

The multi-layered inter-relationships that this scoping review has begun to uncover, opens up the opportunity for significant growth in understanding in the future. By starting with a focus in this report on the known factors for a thriving place, and how they inter-relate, it builds a strong foundation for deeper analysis of the many other factors that support the capacity to thrive at all levels of this system.



To build on the foundation this report provides, the suggested next step for the Fund is to use the key findings to inform priority areas for delivery of the thriving communities strategy.

The report can also provide insights for the Fund which can:

1. inform investments in new or existing metrics to gather better and more consistent data to inform strategy and investment
2. inform investments in further research and evidence reviews to fill priority gaps in understanding – particularly with regard to the relationship between impacts of interventions and place – the key to thriving communities, not just thriving individuals.
3. improve and inform the Fund's model of thriving communities

The content of the report is also likely to be of interest beyond the Fund, across government, the private sector and civil society. This report provides a useful consolidation of what we know in one place, whilst also articulating the circularity and complementarity of different determinants and outcomes. Different actors can identify the determinants that are within their sphere of influence, whether they be policy makers at the highest level tackling poverty deprivation at the national level, or small businesses seeking to improve their footprint on local neighbourhoods, whilst also recognising that all these factors interact and are dependent on local context. It can therefore provide both a resource to improve the knowledge base of a diverse range of actors, as well as something which brings together these actors around a shared goal and understanding of what's important for people and places.

The research presented here does however remain patchy, and limited with respect to informing decision making for specific projects or policies. As this is based on existing evidence, there is also little that is likely to surprise the reader or inform a change in a current decision or direction. However, it serves a valuable purpose in providing a stock take that can go on the drive and inspire future research that does seek to answer some of the more complex and dynamic questions of what works for communities to thrive, in a way that is relevant to a diversity of stakeholders.

# 2. EVIDENCE REVIEW: WHAT HELPS A COMMUNITY THRIVE?

**This section uses the available evidence to establish what is known about the determinants in terms of both the factors (underlying conditions) and interventions (actionable) that contribute to thriving communities.**

## 2.1 Introduction

This section presents the findings from a review and synthesis of quantitative and qualitative literature (See appendix 2 for the methodology for the evidence review) on the determinants of thriving communities.

We have used additional new findings from analysis of data from [Understanding Society](#). This analysis explores the relationship between these determinants and thriving community outcomes. The findings sit under the 'relationships and connections' and 'people-led' themes (see Appendix 3 for methodology). Where we've used this data analysis in this report, you'll see this icon



Full results from the data analysis are presented in Section four, and where you see this icon.

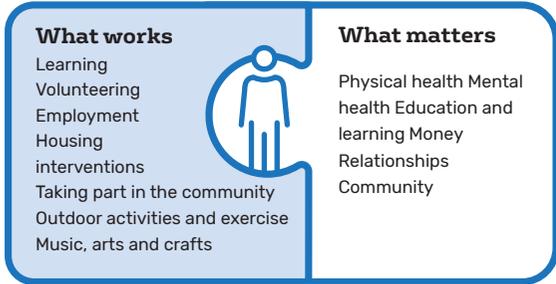
The following sections set out the emerging evidence across three of the outcome areas identified by the Fund: individual wellbeing and resilience; relationships and connections; and people led. For each outcome, we present the findings according to:

- Evidence on factors, or underlying conditions that determine thriving community outcomes
- Evidence on interventions that are potentially directly actionable by the Fund, or grantees, that can have an impact on thriving community outcomes

## 2.2 Individual wellbeing

The Fund's model describes the theme of individual wellbeing and resilience as people being enabled to live fulfilled lives. This includes:

- being physically and mentally well
- having opportunities to develop skills, enabling people to achieve their goals
- having the financial and emotional resilience to overcome challenges.



### An holistic approach to individual wellbeing

The description above accounts for an person’s health, skills, goals and resilience. However, it doesn’t provide a comprehensive reflection of all aspects of a person’s wellbeing.

A more holistic approach to individual wellbeing would include the importance of:

- pleasure and happiness
- psychological aspects of wellbeing, including purpose and a feeling that life is worthwhile,
- a person’s overall evaluation of their life satisfaction.

It is also important to distinguish between **objective aspects of our wellbeing** – such as people’s diagnosed health conditions or their financial status – and **subjective aspects**, which ask people directly how they feel about their own lives.

### Why use subjective wellbeing measures?

Subjective wellbeing questions are a powerful way to explicitly value a person’s own perspective and experiences when talking about their wellbeing. They are now systematically measured in the UK through the ONS’ Annual Population Survey, as well as through many other surveys and evaluations.



The Fund’s model would benefit from making the importance of subjective wellbeing more explicit, which would complement the related value of being People led.

In this report, the outcome indicators we looked at for this project that measure changes to a person’s wellbeing are:

- being physically and mentally ‘well’
- life satisfaction
- ‘flourishing’ (self-confidence, sense of identity, sense of purpose)



We did not look at individual resilience outcomes because there is still no agreement in research, policy or practice about what constitutes resilience or how to measure it.

## 2.2.1 Factors and conditions that affect individual wellbeing

### Physical and mental health

- Being in good health, as well as being able to practice components of a healthy lifestyle (doing physical exercise, eating fruit and vegetables), is positively associated with our subjective wellbeing<sup>1</sup>.
- ❌ • Mental health is the biggest single factor that explains the variation in the subjective wellbeing of the population<sup>2</sup>. The distress mental illness causes is compounded by the stigma associated with diagnosis, as well as the experiences that led to the diagnosis. These can all have a large and lasting negative affect on our wellbeing.
- ❌ • The effects of poor mental health impact wellbeing indirectly and directly: directly in terms of how someone feels, in themselves, and indirectly in terms of their ability to function, such as reducing the likelihood of employment or other meaningful activity for adults and the future employment paths for young people<sup>3</sup>. Having poor mental health can affect not only how people enter the workforce, but how they leave it: poor mental health can lead to early retirement<sup>4</sup>.

### Education and learning

- Learning is good for wellbeing, overall<sup>5</sup>. Taking part in learning can reduce depression and stress<sup>6</sup>.
- The links between formal education and wellbeing are less clear: informal education is associated with low wellbeing, but there is no clear evidence on the direct impact of higher education on wellbeing<sup>7</sup>. Participating in higher education has a more indirect impact on wellbeing, in terms of providing job quality and life comforts<sup>8</sup>.
- What and how people learn is important. 'Hard' outcomes, such as a qualification, increase the chances that participating in learning activities has a lasting impact on wellbeing<sup>9</sup>.
- The learning environment affects learning outcomes - creating a place that offers a source of support<sup>10</sup>. There is evidence that learning within a community setting is good for wellbeing by facilitating social contact<sup>11</sup>.
- Participating in informal or unstructured learning is better for some groups' wellbeing: there is initial evidence for this in relation to retired men<sup>12</sup>.

1 ONS (2018)  
2 Clark et al (2017)  
3 Gedikli et al (2018)  
4 Gedikli et al (2018)  
5 Watson et al (2017)  
6 Watson et al (2017)  
7 Clark et al (2017)  
8 Clark et al (2017)  
9 Watson et al (2017)  
10 Watson et al (2017)  
11 Watson et al (2017)  
12 Watson et al (2017)

## Employment

- Having a job is the second biggest factor associated with subjective wellbeing<sup>13</sup>.
- ⊗ • Being out of work damages wellbeing for everyone, regardless of age, gender, location, ethnicity, level of education<sup>14</sup>. We do not adapt to unemployment and the effects can worsen with time<sup>15</sup>.
- ⊗ • However, there are some characteristics that can increase the negative effects of unemployment: being conscientious, being a man (although men's wellbeing increases more once reemployed) and being a young person. Those with skills, including as a result of higher levels of education, and who are more adaptable suffer less<sup>16</sup>.
- Re-employment can boost wellbeing, but the type of work individuals move into matters: the quality of the job, whether it is temporary and the type of work affect the level of wellbeing increase<sup>17</sup>.
- Being in a job that is stable and has prospects is linked to higher wellbeing<sup>18</sup>.
- A supportive and effective workplace appears to be key for employee wellbeing. For example, one review found that training leaders to be effective and supportive can enhance the wellbeing of both leaders and employees<sup>19</sup>, and training staff in the skills they need to make their own jobs better may have positive effects on wellbeing<sup>20</sup>.

Such training focuses on developing personal resources, skills and problem solving. In addition to training, changes to ways of working (e.g. office layout, job design) can have an effect on both wellbeing and performance<sup>21</sup>.

- ⊗ • Promotions can impact our mental health, although the evidence is initial: there is mixed evidence of the immediate impact, and some evidence to suggest that long-term there can be a negative impact on mental health<sup>22</sup>.
- Having a bridging job can help to protect wellbeing during the transition to retirement<sup>23</sup>. Also, job type and our personal circumstances can impact how retirement affects our wellbeing. If we see our jobs as 'prestigious, successful careers', it can be hard to make adjustments to our new situation<sup>24</sup>.

13 Clark et al (2017)  
14 Gedikli et al 2017  
15 Gedikli et al 2017  
16 Gedikli et al 2017  
17 Gedikli, Bryan et al (2017)  
18 Gedikli, Bryan et al (2017)  
19 Watson, Tregaskis et al. (2017)  
20 Daniels et al (2017)  
21 Daniels et al (2017)  
22 Gedikli, Bryan et al (2018)  
23 Gedikli, Bryan et al (2018)  
24 Gedikli, Bryan et al (2018)

## Money

- Income has a direct effect on wellbeing, but it is more pronounced for those in poverty and becomes less important as income increases<sup>25</sup>. As income increases, money becomes important as a tool to purchase things that drive wellbeing: experiences, time with family and friends<sup>26</sup>.
- ⊗ • Being in debt is associated with lower wellbeing<sup>27</sup>. Where financial and welfare information and advice is available, it can help elderly people to remain independent<sup>28</sup>.

## Relationships

- Being married or having a long-term partner is the third most significant association with subjective wellbeing<sup>29</sup>.
- ⊗ • Our spouse's, or partner's, wellbeing is affected by our drop in wellbeing when we are unemployed<sup>30</sup>.
- Having close relationships can help to overcome challenges in people's lives: having someone to rely on, both family and friends, can mitigate the impacts of becoming unemployed<sup>31</sup>, as well as transitioning into retirement<sup>32</sup>.
- Neighbours can provide a source of practical help, routine advice and emotional support<sup>33</sup>.
- For young people, social networking websites and apps can help to facilitate supportive relationships<sup>34</sup> within a community of interest.
- For families, relationships can be enhanced by learning opportunities for individuals<sup>35</sup> as well as taking part in outdoor recreational activities. These can help social bonding as a family<sup>36</sup>.
- ⊗ • Relationships can also be a cause of negative wellbeing. Poor relationships with neighbours, for example, or social networking sites that do not uphold positive values and affect participation in other activities, can have negative impacts on wellbeing.

25 Clark et al (2017)

26 Clark et al (2017)

27 Tay et al (2016)

28 Bagnall et al (2017)

29 Clark et al (2017)

30 Gedikli et al (2017)

31 Gedikli et al (2017)

32 Gedikli, Bryan et al. (2017)

33 Buonfino (2006)

34 Bagnall et al (2017)

35 Watson et al (2017)

36 Mansfield et al (2018)

## Places and spaces: the community



- Levels of deprivation within our community are associated with our individual wellbeing, regardless of our individual financial situation<sup>37</sup>.



- Inequalities in wellbeing are positively associated with levels of deprivation and unemployment, and levels of median income<sup>38</sup>. The higher the levels of deprivation, the greater the inequalities.
- Being in an area with higher average wellbeing – a rural area, for example – does not result in having lower inequalities. In fact, rural areas are associated with higher inequalities, possibly linked to higher impacts of being unemployed in rural areas<sup>39</sup>.



- Time spent commuting, and air and noise pollution, are negatively associated with wellbeing<sup>40</sup>
- The resources available in a community can affect the physical, mental and social wellbeing of the community. Such resources include places and spaces that the community can use for interventions and activities, such as historic places and assets<sup>41</sup>.
- Having higher levels of engagement in heritage activities and use of green space is associated with lower wellbeing inequality in a place<sup>42</sup>.
- Local resources that affect wellbeing<sup>43</sup> include:
  - the strength of the relationships
  - the level of 'neighbourliness' in the community<sup>44</sup>
  - levels of social cohesion
  - having a sense of attachment to a neighbourhood.
- Good relationships at a local level can have beneficial effects on quality of life<sup>45</sup>. On an individual level, there is evidence of the negative impact that loneliness has on physical and mental health<sup>46</sup>.

37 Curtis et al (forthcoming)

38 Abdallah et al (2017)

39 Abdallah et al (2017)

40 Stoll et al (2012)

41 Pennington et al (2019)

42 Abdallah et al (2017)

43 Curtis et al (2019)

44 Buonfino (2006)

45 Buonfino (2006)

46 Hole (2011)

## 2.2.2 Interventions: what is actionable?

### Taking part

- Being involved in making decisions in the community can have a positive effect on the physical and mental health of both those involved and the wider community, as well as on the social determinants of health. However, joint decision making and co-production takes effort and resources from participants, and can have detrimental effects if people's needs and abilities are not considered.
- This has been seen in interventions that use community engagement to change health behaviours<sup>47</sup>, as well as broader projects that involve local people in urban design and the design and delivery of public health interventions<sup>48</sup> (where most of the evidence comes from). One review found that there was a higher level of community engagement in interventions that target health outcomes, and a particular effect when lay people were involved in delivery<sup>49</sup>. Another study found that a collaboration between professional and voluntary workers could improve health outcomes<sup>50</sup>. The majority of the evidence is from the health sector, but this could be usefully tested in other settings.
- Taking part in community engagement activities has also been found to have an impact on physical health. An evaluation of the Community Connectors projects found that the health scores of those who participated improved. It was thought this was driven by the effect of increased socialising, as well as increased activity levels from getting to and participating in the projects<sup>51</sup>.  
Additionally, socialising was found to impact on mental health, by increasing the mood of the participants as well as increasing the number of friends they had to provide support<sup>52</sup>. This was also true for the wider Ageing Better programme: participation had a positive impact on health<sup>53</sup>. Another project working with mothers found that providing one-to-one and peer support helped to reduce stress and increase self-esteem<sup>54</sup>.
- Community involvement may also result in people developing skills as a result of their participation, as well as improving how people feel. Reviews have found skills development in organisation, group work and implementing rules<sup>55</sup>.  
Evidence shows people can develop skills as the result of community development projects, community hubs – as a site of developing knowledge and skills – and changes to green and blue spaces<sup>56</sup>.
- For young people, taking part in community volunteering programmes helped them to develop leadership, communication and organisational skills<sup>57</sup>. There is emerging evidence from the Talent Match programme, that the young people that were involved in the design and delivery of activities were more likely to enter education<sup>58</sup>.



47 Bagnall et al (2017)  
48 Pennington et al (2018)  
49 Bagnall et al (2017)  
50 IVAR (2015)  
51 Williams et al (2018)  
52 Williams et al (2018)  
53 Big Lottery Fund (2018)  
54 IVAR (2015)  
55 Pennington et al (2018)  
56 Bagnall et al (2018)  
57 Bradbury and Kay (2008)  
58 Bashir et al (2018)

- Taking part in community activities enables people to connect. The Community Connectors programme has helped people who are lonely and isolated to build trust and rapport with other people, which has helped them to increase their self-confidence<sup>59</sup>.
- For young people, participating in social networking sites can help to increase self-confidence, as well as identity formation<sup>60</sup>.
- More intensive participation can impact on the self-confidence of young people<sup>61,62</sup>, such as being involved in the design and delivery of community projects

## Volunteering

- Volunteering has been found to have a positive impact on physical and mental health<sup>63</sup>. In particular, evidence has found that it can have a favourable effect on depression<sup>64</sup>. In one study, researchers found that when people took on an interesting and varied role in volunteering (outside their own identity), there was an impact on their self-worth. This was particularly pronounced for people from vulnerable backgrounds<sup>65</sup>.
- For older people, there can be multiple positive effects from volunteering. One study found that older people who did not volunteer had significantly worse health than those who did<sup>66</sup>. Another found that volunteering can help older people who feel they have lost one of their 'role identities' (i.e. that of being an employee, a parent, a partner)<sup>67</sup>.
- Volunteering can also help to increase our sense of purpose<sup>68</sup>, increase the quality and quantity of our social connections and increase our self-esteem<sup>69</sup>.

## Learning

- Learning which builds ones confidence can have an impact on wellbeing. This can then help us to progress in education and broader personal development<sup>70</sup>.
- Literacy learning, in particular, has been found to have an impact on wellbeing; it is likely that this is enabled through increased self-confidence<sup>71</sup>.
- Interventions designed to improve wellbeing can affect the motivation to participate in learning, as well as having

59 Williams (2018)  
 60 Bagnall et al (2017)  
 61 Bashir et al (2018)  
 62 Bradbury and Kay (2008)  
 63 Anderson et al (2019)  
 64 Jenkinson (2013)  
 65 IVAR (2015)  
 66 Van Willigen (2000)  
 67 Greenfield and Marks (2004)  
 68 BLF (2018)  
 69 BLF (2018)  
 70 Watson et al (2017)  
 71 Watson et al (2017)

positive effects on performance and achievement<sup>72</sup>. Participating in learning activities can help us to develop a sense of purpose and help progression. This has been particularly noted for groups at risk of discrimination, marginalisation or exploitation, for example single mothers<sup>73</sup>.



- Participation in social networking sites has been found to be positively associated with educational outcomes<sup>74</sup>. The evidence we have for this finding is from young people, so more research is needed to understand the experience of other age groups.
- For older people, musical activities have been found to motivate individuals to learn<sup>75</sup>.

## Music, arts and crafts

In terms of interventions, there is a lot of evidence of the efficacy of music activities.

- **Taking part in visual art interventions has been found to create the conditions for improved wellbeing**, through increasing confidence, as well as acting as a stepping stone into other participation<sup>76</sup>. It can improve the self-reported health of women<sup>77</sup>. Drawing interventions which involve representations of emotions has been found to help reduce trauma. More generally, taking part in arts and crafts improves the quality of life for those with Post Traumatic Stress Disorder<sup>78</sup>.
- **Listening to music has been found to have a positive effect on a number of groups**. It can help young people to alleviate anxiety, improve wellbeing and enhance the effects of physical activity; for healthy adults it can help to reduce stress, negative mood and state anxiety<sup>79</sup>. In addition, it can help to alleviate anxiety and anger in prison populations<sup>80</sup>.
- **Research shows that interventions that are targeted and culturally relevant can be effective at reducing depression** with a number of groups: in older people with chronic conditions in residential or community settings; and nursing students in a college environment.<sup>81</sup>
- **Structured music interventions can reduce the intensity of stress, anxiety and depression in pregnant women**<sup>82</sup>.
- **Music therapy has been found to alleviate anxiety in undergraduate students and improve the spiritual wellbeing of hospice patients**<sup>83</sup>.
- **Brief music interventions have supported the wellbeing of palliative care patients in a hospice**<sup>84</sup>.

72 Watson et al (2017)  
73 Watson et al (2017)  
74 Bagnall et al (2017)  
75 Daykin, Julier et al. (2016)  
76 Tomlinson et al (2018)  
77 Tomlinson et al (2018)  
78 Tomlinson et al (2018)  
79 Daykin, Julier et al. (2016)  
80 Daykin, Julier et al. (2016)  
81 Daykin et al. (2016)  
82 Daykin, Julier et al. (2016)  
83 Daykin et al. (2016)  
84 Daykin et al. (2016)

- Music and singing interventions have been found to enhance the wellbeing of those with specific conditions (for example, chronic obstructive pulmonary disorder and post traumatic stress disorder)<sup>85</sup>.
- Brief music interventions have been found to help decrease stress and enhance wellbeing in the workplace<sup>86</sup>.
- **Group singing can foster happiness and enhance wellbeing<sup>87</sup>** and it has also been found to be beneficial for specific groups:
  - for older people singing is beneficial, as is the process of writing and performing<sup>88</sup>
  - for young offenders singing – particularly in public – can support their wellbeing through increasing their self-esteem<sup>89</sup>.
- **Taking part in music or artistic activities can be a means of constructing or revising personal identity.** This has been found for older people who participate in choirs<sup>90</sup>, those who participate in the visual arts<sup>91</sup> as well as music interventions more generally<sup>92</sup>.  
They can also help to enhance a sense of purpose: both listening and performing music<sup>93</sup>. For older adults, taking part in musical activities is also a way of expressing their spirituality and reminiscing about their lives<sup>94</sup>. This can help them to share things that are meaningful to them with others.

### Outdoor activities and exercise

Physical activity (especially if outdoors) has been found to be associated with increased wellbeing, self esteem and cognitive function, decreases in tension, anxiety and depression and increased energy.

- There is high quality evidence about certain types of activities. For example: taking part in physical activity and exercise has a positive impact on wellbeing.
- Taking part in yoga or Baduanjin-Qigong can improve feelings of anxiety, depression, anger, attention and overall subjective wellbeing<sup>95</sup>. Dance training can help to reduce self-reported depression<sup>96</sup>.

### Housing interventions

- Interventions that make houses safer and healthier have been found to have a positive impact on physical health. Examples include interventions to reduce mould and promote good respiratory health and those that tackle fuel poverty<sup>97</sup>.
- A systematic review of different interventions found that the Housing First programme, which focuses on moving

85 Daykin et al. (2016)  
 86 Daykin, Julier et al. (2016)  
 87 Daykin, Julier et al. (2016)  
 88 Daykin, Julier et al. (2016)  
 89 Daykin, Julier et al. 2016  
 90 Daykin, Julier et al. (2016)  
 91 Tomlinson et al (2018)  
 92 Daykin, Julier et al. 2016  
 93 Daykin, Julier et al. 2016  
 94 Daykin, Julier et al. 2016  
 95 Mansfield et al (2018)  
 96 Mansfield et al (2018)  
 97 WWCW (2016)

people into independent and permanent housing then providing additional support, have been found to increase housing stability and health outcomes<sup>98</sup>. Housing First has also been found to have positive effects on mental health<sup>99</sup>.

## Places and spaces

- Changes to places and spaces has been found to increase the levels of physical activity and other health behaviours. This is the case at the area level in terms of urban design, changes to specific green and blue spaces, as well as temporary changes to the use of a space<sup>100</sup>.
- Outdoor recreation interventions have been found to help families improve their sense of identity through connecting with nature<sup>101</sup>.

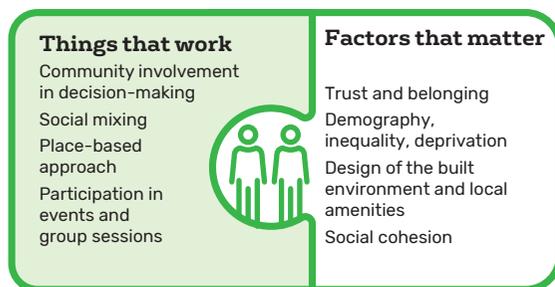
## Employment

- **Integrated support for work and non-work issues can help young people progress into employment.** Such support – including the provision of high-quality information – can help them to overcome practical barriers, improve their wellbeing and confidence<sup>102</sup>.
- **Progression into work can be influenced by young people’s perceptions of the quality of the job and their understanding of their options<sup>103</sup>.** Once young people have moved into work, retention is most likely when they have moved into a role for which they are trained and have an interest in<sup>104</sup>. Working with employers, who have a big role in their progression<sup>105</sup>, as well as ensuring there is in-work support available<sup>106</sup> can help to ensure they remain in work.

## 2.3 Relationships and connections

The Fund’s model describes the theme of Relationships and connections to be where people and communities connect with, understand and support one another. This includes:

- People have positive social connections with other people and groups and are not lonely or isolated
- People and communities have trust in one another, which enables them to form supportive networks and have collective strength



98 Chambers et al (2018)  
 99 Chambers et al (2018)  
 100 Bagnall et al (2018)  
 101 Mansfield et al (2018)  
 102 Wells and Pearson (2018)  
 103 Wells and Pearson (2018)  
 104 BLF (2018b)  
 105 Wells and Pearson (2018)  
 106 BLF (2018b)

This theme recognises the importance of relationships for communities. The concept described here is closely related to social capital. This has a long history of research associated with it, and in the UK is defined as encompassing:

- personal relationships
- social support networks
- civic engagement
- trust
- cooperative norms<sup>107</sup>.

Some aspects – particularly civic engagement – overlap with the people led theme, but social capital could still provide a helpful framing to search for additional supporting literature.



It would be helpful for the Fund to distinguish more explicitly between the distinct concepts of social connections, loneliness, and isolation. These have different causes and implications<sup>108</sup>.

The Fund could also usefully differentiate more clearly between relationships that are close and provide people with someone to rely on, compared with those which focus on mixing and interacting with others in a more social context.

There is also an important distinction between bridging capital and bonding capital. This takes into account whether the relationships and connections are between people that are very similar (bonding), or diverse (bridging). Diversity and inclusion are important aspects of community that are not currently recognised in this model.

The outcome indicators we looked at that measure the quality and strength of relationships and connections consistent with the fund's model are:

- Sense of belonging and sense of trust
- Neighbourliness
- Social cohesion
- Social support
- Social capital
- Prosocial behaviours: kindness, altruism

107 <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/socialcapitalintheuk/may2017>

108 <https://whatworkswellbeing.org/blog/untangling-loneliness-what-does-it-mean-how-do-we-experience-it-across-the-lifecycle/>

For the quantitative data analysis, four outcome variables under the relationships and connections theme that are included in the Understanding Society data set were selected to be tested against a range of determinants:

- sense of neighbourhood belonging
- perceived neighbourliness
- having local friends
- safety at dark.

## 2.3.1 Factors and conditions that affect outcomes

### Demography, inequality, deprivation



- Places with higher income inequalities have lower levels of trust in other people, but other factors also contribute<sup>109</sup>, as changes in inequality within a place does not directly result in significant changes in trust.
- Areas where there are more children and old people, and a high percentage of homeowners are perceived to be more neighbourly<sup>110</sup>.
- Areas where there are people with an employment status that provides time to be in their neighbourhood (such as flexible workers, unemployed adults, parents) scored high on a neighbourliness index. Conversely, areas where there is a high proportion of commuters or second homes score low on neighbourliness levels<sup>111</sup>.



- Perceptions of neighbourliness is negatively affected by recent migration, language barriers, crime, litter and poor neighbourhood governance<sup>112</sup>.
- People's satisfaction with an area has a relationship with the levels of interaction and mutual support. This increases the willingness of individuals to get involved in local organisations and activities<sup>113</sup>. In addition to the types of people living in an area, households with long-term residency have better connections and support networks<sup>114</sup>.

109 Fairbrother and Martin (2012)

110 Buonfino (2006)

111 Buonfino (2006)

112 Buonfino (2006)

113 Buonfino (2006)

114 Buonfino (2006)



Consistent with previous research, we found that areas where there are more elderly people and households with children are more neighbourly. They have higher scores on neighbourhood belonging, perceived neighbourliness, having local friends and, in the case of the proportion of people over 65, safety at dark.



We also confirmed the finding that ethnic diversity in an area is associated with poorer relationships and connections outcomes, even controlling for other demographic factors. Also consistent with previous literature, we found a negative association with resident turnover on neighbourhood belonging. However, it is worth noting that relationship between resident turnover and the other relationships and connections outcomes were not significant and mostly not even in the expected direction.

Two findings add to the research described above.



1. We found that income deprivation was negatively associated with perceived neighbourliness and neighbourhood belonging, and with feeling safe after dark in the local area. Rurality was positively associated with the same outcome variables, although a negative association was found between rurality and having local friends.
2. Contrary to previous research, we found no effect of unemployment rate or inequality. Commuting also had no consistent effect, and indeed in one case - the percentage commuting 10-30km to work, was actually positively associated with having local friends.

### **Social relations**



- Social cohesion is related to community levels of deprivation and social fragmentation. Areas with lower (i.e. worse) indices of deprivation and a higher social fragmentation index report lower social cohesion and attachment to the neighbourhood<sup>115</sup>.
- Having a sense of 'neighbourliness' can contribute to resident's feelings of safety and belonging<sup>116</sup>. Feeling a sense of belonging, at a group and community level, enables learning opportunities to impact on wellbeing<sup>117</sup>.

115 Curtis et al (2019)  
116 Buonfino (2006)  
117 Watson et al (2017)

## Design of the built environment and local amenities

The built environment – particularly accessibility<sup>118</sup> – and assets in a place affect the level of social cohesion, neighbourliness and interactions. One review found that urban planning can contribute to the development of social capital by:

- ensuring the co-location of services
- planning infrastructure alongside residential growth to ensure there are adequate meeting spaces for social, recreational and educational purposes<sup>119</sup>.

Having nurseries, schools, well-kept public spaces, health centres and other places that provide support, as well as somewhere people can spend time and meet other people, supported a sense of neighbourliness<sup>120</sup>.

- Diversity of land use positively affected social cohesion by generating positive perceptions and the potential frequency of neighbourly behaviour<sup>121</sup>. More specifically, having green and blue spaces where interventions and activities can be delivered can provide opportunities for local people to participate and improve social interactions<sup>122</sup>.

Other amenities that can help build social relations between groups include local shops, markets and places to informally trade, as well as extended schools, street parties and internet based local information services<sup>123</sup>

- Local spaces that support and encourage interactions between users and contribute to a shared sense of identity, are linked to increased relations between neighbours, as well as perceived social cohesion and an attachment to place<sup>124</sup>.

Such places can be found in services or places provided by public, private, third sector, even if facilitating connection is not their primary aim<sup>125</sup>: for example, on public transport or in street design. This may be particularly relevant for older and more vulnerable people for whom physical and psychological barriers can contribute to loneliness. Ensuring accessible streets and transportation can help with accessing places for social interaction<sup>126,127</sup>. However, research has found that shared spaces that do not contribute to building a shared identity do not have a significant impact on social cohesion<sup>128</sup>.

118 Mazumdar et al (2017)

119 Bagnall (2017)

120 Buonfino (2006)

121 Wilkes et al (2019)

122 Bagnall et al (2018)

123 Buonfino (2006)

124 Wickes et al (2019)

125 Bagnall et al (2017)

126 BLF (2018)

127 Bagnall et al (2017)

128 Wickes et al (2019)



- Changes to neighbourhood design that bring together people from different ages and social backgrounds can positively affect the sense of belonging and social cohesion in a community<sup>129</sup>. Activities can be as small as changing people's porches and gardens to promote social interaction<sup>130</sup>. However, some changes in the use of space, even temporarily, can lead to segregation or exclusion of certain groups<sup>131</sup>.

Consistent with previous research, we found that the presence of schools and other educational bodies within an area was associated with stronger relationships and connections, specifically in terms of perceived neighbourliness and safety after dark (but see Section four for more detail on this effect). We also found a positive relationship between green space and perceived neighbourliness and neighbourhood belonging. Contrary to what was expected, having access to - but not necessarily engaging with - heritage assets was associated with lower neighbourhood belonging in the local area survey data set. Long journey times to key services were associated with having local friends. The effect of local businesses was mixed - increasing safety, but decreasing local friendship circles. However, as previously described, the findings related to the wellbeing impacts of heritage are complex, and you can read a fuller exploration of this on page 65 of this report.

Consistent with the research highlighting the benefit of green space, we found air pollution to have a negative association with perceived neighbourliness, having local friends, and feelings of safety.

We included air pollution as a proxy for the urban landscape - assuming that areas with higher air pollution are more likely to have busy roads and industry that disrupt the social fabric of an area. But it may be that air pollution has a more direct effect on social capital, for example by reducing the likelihood that people spend time outdoors.

129 Bagnall et al (2018)

130 Buonfino (2006)

131 Bagnall et al (2018)

## 2.3.2 Interventions: what is actionable?

### Community involvement in decisions

- Involving communities in decision-making processes, for example citizens juries or saving and enhancing community facilities, can reduce isolation and build social networks<sup>132</sup>. At a broader level, involving communities in neighbourhood design projects can potentially improve pride in the area, social relations and social cohesion<sup>133</sup>. At a programme level, evidence has found that involving young people in the design and delivery of a programme helped them to develop skills and experience to better work with others in their area<sup>134</sup>. Those activities that promote involvement in actions to improve the social determinants of health have been found to increase social capital and social cohesion for both community groups involved and the wider community<sup>135</sup>.

### Places and spaces

- Participating in activities and interventions in historic buildings and places can have an impact on a communities' social connections and sense of belonging<sup>136</sup>.
- Delivering interventions in the natural environment can support community connections, networks and social relationships<sup>137</sup>.
- Community hubs may improve trust, pride in the local area and social cohesion by bringing together different groups<sup>138</sup>.
- Social networking sites can promote a sense of belonging and facilitate the development of supportive relationships for young people<sup>139</sup>.
- Urban renewal projects can lead to increased social connections<sup>140</sup>, as can community development projects (which may have a physical presence)<sup>141</sup>.
- Making improvements to green and blue space, even temporary changes, can increase social interactions. This may lead to increased social networks<sup>142</sup>. Such space changes can be important for families in terms of offering them a place to do things together.  
It's hard to measure one-off activities, so the evidence is mainly focussed on sustained engagement.

132 Pennington et al (2018)

133 Bagnall et al (2018)

134 Bashir et al (2018)

135 Bagnall et al (2017)

136 Pennington et al (2019)

137 Bagnall et al (2017)

138 Bagnall et al (2018)

139 Bagnall et al (2017)

140 Pennington et al (2018)

141 Bagnall et al (2018)

142 Bagnall et al (2018)

## Participation in events and group sessions

- Participation in events and interaction with people through group sessions can help to tackle loneliness, build social relations and encourage social mixing through a meaningful activity.
- Successful interventions to improve social engagement shared a number of characteristics:
- group interventions with a focused activity;
  - target specific groups
  - activities that enable some level of participant control
  - consultation with the target group before the intervention<sup>143</sup>.

Another meta review found that interventions targeting social cognition - a person's thoughts about themselves and others - were far more effective than the other strategies<sup>144</sup>.

- Participating in group sessions can increase interactions with others<sup>145</sup> as well as increasing a sense of civic engagement<sup>146</sup>. Participation can result in older people having more social contact with family and friends as well as joining in with local events and group activities<sup>147</sup>. Events can provide a 'hub' for people to meet which can improve social relations within the community, in particular where they are able to provide a neutral space for different groups to socialise<sup>148</sup>.
- Specific activities that have been found to contribute to social cohesion include:
  - literacy learning<sup>149</sup>
  - learning, including specifically in communities, which can help to increase social contact and facilitate connections to the community<sup>150</sup>
  - sports activities, particularly those that promote relationships with other people<sup>151</sup> which can be beneficial for marginalised or vulnerable groups<sup>152</sup>
  - visual arts activities that involve people doing art practices with others<sup>153</sup>
  - group singing projects that help to build social networks<sup>154</sup>.

143 Bagnall et al (2017)

144 Hole (2011)

145 Bradbury and Kay (2008)

146 Bradbury and Kay (2008)

147 Anderson et al (2019)

148 Bagnall et al (2018)

149 Watson et al (2017)

150 Watson et al (2017)

151 Mansfield et al (2018)

152 Bagnall et al (2017)

153 Tomlinson et al (2018)

154 Daykin, Julier et al. (2016)

- For older people a number of activities can help to reduce isolation and increase social engagement. For example, group-based reading helps participants to relate to other people in a different way<sup>155</sup>; indoor gardening in care settings and outdoor gardening in the community, music interventions such as group singing, reminiscence activities, humour therapy programmes can reduce loneliness in older people<sup>156</sup>. There is some evidence that Animal Assisted Therapy can increase perceived social support and interaction, which benefit the loneliest people the most<sup>157</sup>. There is no available evidence that physical activity (such as supervised walking) or cognitive enhancement directly contributes to reducing loneliness<sup>158</sup>.
- Interventions that focus on helping people to form new relationships or improve their current ones have mixed results. Training care receivers how to optimise their relationships with care-givers was found to be effective in reducing loneliness, however an intervention focused on developing social skills more generally was not<sup>159</sup>.
- Internet and digital skills training in people's homes (including care homes) or in groups, where videoconferencing was used to link older people to their family members, was found to have a positive effect on reducing loneliness<sup>160</sup>.

### **How services and activities are delivered matters.**

- Smaller interventions that are focused on bringing people together appear more effective in reducing isolation. For example, one unpublished study looked at an intervention that brought together younger people seeking housing with older householders, to provide housing and companionship. The study found that the companionship provided a mechanism for reducing loneliness<sup>161</sup>. Another project organised shared meals for six to eight people in local restaurants, which helped participants to develop more meaningful relationships than larger events, such as coffee mornings that participants found daunting<sup>162</sup>.
- Advice and signposting can help connect, and reconnect, people to communities and networks. Collaborating with community members with good local insight can improve knowledge and promote networking<sup>163</sup>; placing link staff in community buildings such as GP surgeries to link to community activities can reduce loneliness<sup>164</sup>; and having a structured and linked programme of community-led activities can help to prevent and tackle loneliness<sup>165</sup>.

155 Anderson et al (2019)

156 Victor et al (2018)

157 Victor et al (2018)

158 Victor et al (2018)

159 Victor et al (2018)

160 Victor et al (2018)

161 Victor et al (2018)

162 Victor et al (2018)

163 Victor et al (2018)

164 Victor et al (2018)

165 Anderson et al (2019)

## Volunteering

Volunteering is linked with increased happiness – especially for those who are unhappy. Volunteering is also associated with a number of other outcomes including social connections, purpose and role identity.

- Participating and giving back to communities can affect people’s future participation and relationships. One study found that volunteering had a bi-directional relationship: those who volunteer experience increased wellbeing, but those with higher wellbeing were more likely to invest time in volunteering<sup>166</sup>.

Other studies have found that participating in community events can influence people to continue to volunteer in their community<sup>167</sup>, and taking part in a community project that promotes interaction with others in the community contributed to a greater sense of altruism in young people<sup>168</sup>.

The study that looked at volunteering placements for young people found that it helped to increase social connectedness, but this depended on the existing relationships and knowledge that the young person gained from their parents and life experience, as well as the context in which the volunteering took place<sup>169</sup>.

## Social mixing

- Having places and spaces to meet new people and engage in meaningful activity can encourage social mixing.

Examples of interventions include:

- community development projects
- temporary changes to the use of a space (this can encourage mixing of different cultural and socioeconomic groups<sup>170</sup>)
- community hubs (these can promote interaction between community members<sup>171</sup>)
- specific activities that bring people together, such as group singing<sup>172</sup>.

Social mixing does not necessarily lead to building of relationships: tolerance may be increased by increased visibility of other social groups, but the result of mixing may be limited to sharing spaces, not building networks<sup>173</sup>. In addition, too much bonding and ‘active neighbourliness’ can lead to self-segregation, if people feel their privacy is breached<sup>174</sup>.



One of the most consistent findings from the research was that areas where local authorities had invested in community development had better relationships and connections outcomes – particularly in terms of perceived neighbourliness and neighbourhood belonging, but also in terms of having local friends and safety at dark. People who lived in areas that had received greater funding from charitable foundations also had more local

166 Abdallah and Quick (2018)  
167 Anderson et al (2019)  
168 Bradbury and Kay (2008)  
169 Bradbury and Kay (2008)  
170 Bagnall et al (2018)  
171 Bagnall et al (2018)  
172 Daykin, Julier et al. 2016  
173 Bagnall et al (2017)  
174 Buonfino (2006)

friends and felt safer. However, when looking specifically at Big Lottery funding<sup>175</sup> in 2015, we found no effect for any outcome variables.

It is possible that this is because of the geographical level at which we were able to conduct this analysis. Data on the Fund's funding was available at the ward level, whereas other charitable funding data was also available at a more granular level.

When we looked at funding from all charitable foundations (excluding the Big Lottery) at ward level, we didn't find any significant effects either. It also possible that this finding is merely a sign that the Fund is very good at targeting resources where they are needed most - ie where there is least thriving - so bigger Fund funding could correlate with low levels of thriving community outcomes because of this, rather than because it has no effect. This analysis was not designed to test for causality in the relationship.

## 2.4 People led

The Fund's model describes the theme of People led to be where people are meaningfully involved in matters that affect their lives and communities. This includes:

- Being able to influence matters that are important to you and your community
- Having access to opportunities and resources, such as jobs, services and facilities, which enable people and communities to make the most of their strengths
- All members of the community being fully included and supported to ensure they have equal voice.

This theme is based on the core values of the Fund and its approach. It encompasses both ideological and practical elements. It primarily describes a means of achieving thriving communities it is not the only model for community development that can achieve thriving, nor one an approach that always necessarily delivers positive outcomes for people and places. For example, outcomes may be dependent on the capacity of the civic core and community engagement. Managed poorly these can have negative wellbeing outcomes for people<sup>176</sup>.

At the same time, there are aspects within the people led theme that could constitute thriving community outcomes. We have included these in our analysis, where they are specifically about empowering people within communities. Some, like political participation, are outside the priorities of the Fund, but are important aspects that matter for wellbeing and are included in other models<sup>177</sup>.

People led is also hard to conceptualise as distinct from the other two themes of individual wellbeing and relationships and connections. Access to opportunities and resources overlaps with the objective aspects



175 Data measuring 'Big Lottery Funding' was taken from 2015, when this was the name under which the Fund, now the National Lottery Community Fund was operating. We have kept the reference to Big Lottery Funding for consistency with the data source.

176 Pennington et al. (2017)

177 See for example the ONS 10 domains for national wellbeing, which include Governance, which include indicators on voter turnout and trust in national government. <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/datasets/measuringnationalwellbeingdomainsandmeasures>, or the OECD Civic Engagement and governance domain, which includes indicators on having a say in government and voter turnout [https://read.oecd-ilibrary.org/economics/how-s-life-2017\\_how\\_life-2017-en#page386](https://read.oecd-ilibrary.org/economics/how-s-life-2017_how_life-2017-en#page386)

of individual wellbeing. Inclusion and diversity in a community overlaps with relationships and connections, and the evidence on the relationships between these elements and others factors or outcomes may bring up contradictions. An example of this is where activities aimed at one particular group have positive benefits to the people included, but don't benefit social mixing.

There are important determinants that affect the likelihood that people are can, or will, participate, engage and take on leadership positions. A more nuanced understanding of who is leading and represented would help to inform how to best articulate the aspects of people led that are consistent with thriving communities from a collective perspective.



There is more circularity within this theme in relation to determinants and outcomes than with other themes. The Fund may wish to separate out aspects of the people led theme that are more outcome-orientated, from aspects that describe the Fund's approach.

Some of the people led outcomes could be included within the individual wellbeing theme. Other aspects of this theme could sit separately from the thriving communities model itself. Instead, it could be used as a lens or a filter, with which to:

- judge interventions used to deliver the model
- help grantees to understand how different people led approaches can be instrumental to broader thriving community outcomes
- provide clarity to grantees on the Fund's vision for who should be leading and how.

Further work to develop this slippery theme conceptually would help in turn to identify the evidence that will be most appropriate to inform the Fund's strategy.

The outcome indicators we looked at that measure the extent to which people are in the lead include:

- political participation
- civic engagement
- access to opportunities and resources
- access to services
- inclusion
- diversity
- having an equal voice.



For the quantitative data analysis, four outcome variables under the people led theme that are included in the Understanding Society data set were selected to be tested against a range of determinants:

- Self-reported sense of political efficacy,
- Membership of various groups and organisations,
- Group activity
- Volunteering

## 2.4.1 Factors and conditions that affect outcomes

### Demography, inequality, deprivation



Some factors and conditions in the data analysis had similar effects in this domain as they did on the relationships and connections domain.

Income deprivation was negatively associated with all outcomes in this domain. Outcomes were mostly better in areas with more elderly people. However, rurality and the proportion of households with dependent children were less important here. Meanwhile, two predictors were found to be positively, and perhaps unexpectedly, related to people led outcomes: percentage commuting and resident turnover. Places with higher turnover and where a greater proportion of the population commute enjoyed higher levels of group activity and membership, and also greater political efficacy. Volunteering was also positively associated with commuting. These surprise findings will be discussed later.

Another surprise was that ethnic diversity, while negatively associated with relationships and connections, was positively associated with all four people led outcomes, particularly strongly in the case of political efficacy.

## Personal characteristics

- Education, age, gender, relationship, having children, working hours and personality type all affect likelihood of volunteering<sup>178</sup> and other forms of civic engagement<sup>179</sup>. There is no significant relationship between income, employment and volunteering.
- Being asked to volunteer increases the likelihood of doing so<sup>180</sup>, in addition to having the motivation, resources and opportunity.
- Less than 10% of the population contribute up to half of all civic engagement, when taking a wider view of civic engagement – as represented by volunteering, charitable donations and participation in civic organisations<sup>181</sup>. This group is most likely to be affluent, middle-aged and highly educated.  
However, such research does not take into account ‘informal giving’ in terms of providing care and support to family, friends and communities. A broader distinction into what it means to be civically engaged may provide a different picture.
- For young people, there are two key drivers of participating in social action: household socio-economic status; and parental guidance and behaviours<sup>182</sup>. Children and young people are more likely to say they will participate if their parents gave them guidance on the importance of helping others. This is particularly the case when the parents themselves modelled the behaviour of helping others.  
Having parents or siblings who volunteer is a predictor of volunteering. As well as the modelled behaviour stated above, this may also be due to the fact that parents who volunteer share their resources and social networks that enable their children to participate<sup>183</sup>.
- Schools and colleges are an important pathway in supporting young people into volunteering, although for ‘prestigious’ sports volunteering opportunities, those with highest attainment and best behaviour were most likely to be nominated, which may affect who ends up volunteering. This is echoed in other research that shows that middle class young people are more likely to be recruited to participate in social action because it’s easier and requires fewer resources<sup>184</sup>.

178 Binder (2013)

179 Mohan and Bulloch (2012)

180 Dartington Service Design Lab (2019)

181 Mohan and Bulloch (2012)

182 Dartington Service Design Lab (2019)

183 Dartington Service Design Lab (2019)

184 Dartington Service Design Lab (2019)

## Neighbourhood design

- Involving the community in decisions about urban renewal can result in greater improvements to the physical environment<sup>185</sup>.
- Changes to neighbourhood design and improvements to green and blue space can increase civic activity<sup>186</sup>.
- The walkability of a place is linked to higher levels of participation in community activities<sup>187</sup>. The study also found that higher levels of walkability influences trust.



We did not find a relationship between green space and any people led outcomes, but air pollution – which was used as a proxy measure of urban design – is negatively associated with volunteering rates, group activity and political efficacy.

## Local amenities



The existence of schools and other educational bodies is positively associated with all four People led outcomes. Heritage assets are also positively associated with political efficacy, while the proportion of businesses that are local is positively associated with political efficacy and volunteering rates. However, journey times to key services are also positively correlated with volunteering rates and group membership.

## 2.4.2 Interventions: what is actionable?

### Involvement in community decisions

- Involving local people in community decisions about how public budgets are spent can increase the wellbeing of those involved and the wider community<sup>188</sup>. It can also help improve the relationship between the community and public agencies<sup>189</sup>. In the longer-term, it can also help to improve civic participation<sup>190</sup>.
- Community engagement initiatives can have an impact on assets and services in the community (such as housing, crime reduction) as well as empowering the community through the process<sup>191</sup>. There are three main effects on wellbeing of communities participating in community engagement projects, listed below.
  - Increased opportunities to influence decisions.
  - Facilitating contact between neighbours
  - Helping people to gain confidence to exercise control<sup>192</sup>.

185 Pennington et al (2018)

186 Bagnall et al (2018)

187 Rogers et al (2012)

188 Pennington et al (2018)

189 Pennington et al (2018)

190 Bagnall et al (2018)

191 Bagnall et al (2017)

192 Bagnall et al (2017)



However, this process was less successful when run as a consultation by professionals. In addition, community decision-making processes have been found to have adverse effects, such as consultation fatigue, distress and physical and mental strain<sup>193</sup>

### Getting involved: groups in the community

- Group sessions for people in the community offer opportunities to learn, build relationships, engage in meaningful exchange, share heritage and culture. Events and temporary use of space can increase civic activity and can also provide opportunities for the community connect to place-based culture and heritage<sup>194</sup>.
- Getting involved in local activities can offer young people the opportunity to develop their skills as part of the co-design and co-delivery of activities. Skills include: teamwork, decision making, leadership and communication. It can also help them to develop their self-confidence<sup>195</sup>.

It can be a catalyst for further engagement in civic activities. For example, research has found that sports volunteering for young people has been found to result in a positive attitudes and behaviour and encouraged further civic activity<sup>196</sup>; older people who participate in Ageing Better activities are likely to increase their engagement in local activities; those that were involved in the Community Connectors project increased their membership of different types of civic organisation<sup>197</sup>. Being involved in the delivery of such projects, for example Community Connect, has been found to slightly affect the perception of community members in being able to influence decisions affecting their area<sup>198</sup>

- Taking part can also affect the outcomes of interventions, as well as affecting civic activity. There is a positive effect from recovery housing, particularly peer-led housing abstinence models, on housing stability<sup>199</sup>. Early experience of design and delivery of social programme affected likelihood of young people to take up volunteering<sup>200</sup>, as did mentoring programmes that help young people to get into volunteering<sup>201</sup>.



People who live in areas where there is greater group and organisation membership have a higher sense of political efficacy.

193 Pennington et al (2018)

194 Bagnall et al (2018)

195 Big Lottery Fund (2018b)

196 Bradbury and Kay (2008)

197 Williams et al (2018)

198 Williams (2018)

199 Chambers et al (2018)

200 Bashir et al (2018)

201 Dartington Service Design Lab (2019)

## Places and spaces

- Access to historic places and spaces (and their associated events and activities) can contribute to the collective empowerment of local people<sup>202</sup>.
- Changes to community hubs can also affect civic participation<sup>203</sup>, for example where gardeners formed their own steering committee and organised 'share tables' for gardeners to share gluts of produce with anyone from the community who wanted it.
- Community and neighbourhood empowerment projects, as well as involving people in decisions, can be an opportunity to bring people into different places and spaces. This can be through events for community members, which bring professionals with certain expertise to participate in a community space<sup>204</sup>.

## Inclusivity and equality of voice

- Group singing and music making sessions can help those from marginalised communities to build relationships, have a meaningful exchange with other community members, as well as being able to share their culture and heritage<sup>205</sup>.
- A lack of specific attention and activities has been identified by a number of groups as having an impact in whether they feel included and have a voice. For example, when generalist organisations are leading activities and they appear to lack knowledge, confidence and desire to build links with minority communities<sup>206</sup>. Programmes do not always need to be different to be effective (in terms of design, management and delivery). However, they do need to respond to the local context, opportunities for collaboration and the available resources<sup>207</sup>.

■  
202 Pennington et al (2018)  
203 Bagnall et al (2018)  
204 Bagnall et al (2017)  
205 Daykin, Julier et al. 2016  
206 BLF (2018)  
207 IVAR (2015)

# 3. FOCUS ON PLACES AND SPACES

**This section consolidates the evidence presented in the previous section. It looks at the effectiveness of different factors and interventions related to 'places and spaces' in terms of there being a relationship with thriving community outcomes.**

The Fund's model describes the theme of Places and Spaces to be where for communities have places and spaces to make good things happen. This includes:

- A built and natural environment that enables wellbeing, that is sustainable and that brings people together
- Places and spaces that foster a shared sense of belonging to the community and in which everyone feels safe.

This description encompasses:

- the physical assets
- the built and natural conditions
- the less tangible aspects of how people feel in a place with respect to safety and belonging.

It would be helpful to separate the existence and design of tangible assets from the activities and events that happen in a place or space, to emphasise the opportunities for using these assets in innovative ways to strengthen communities. This raises the question of whether spaces and places have intrinsic value, or if the value from a thriving community perspective is determined by how they are used.

## **Borders, scale and communities**

This theme includes a lot of diverse determinants that have different roles and which are applied at different levels to communities. The most challenging aspect of applying this theme to the research is in identifying the borders between different places and spaces, and how this corresponds to the borders of a community.

Data on places and spaces can be available at the asset level, for example, the existence of a park, but:

- What community can be expected to benefit from this park?
- Does a green space that is recognised as a national asset such as a national park, benefit communities across the UK, or just those in the proximity of the park?

Data is much more prevalent at the local authority level than it is at the neighbourhood or ward level, which makes local level associations difficult to identify empirically.

## Data availability

Further challenges to analysing the evidence on the places and spaces theme include the broader limitations of data availability, even at the local authority level. Data on assets (rather than deficits), their quality and participation remain limited.

Places and spaces are dynamic, with physical infrastructure, demographics and economic growth or decline changing, sometime relatively quickly. Understanding the effect of these changes would require longitudinal data that can be analysed at the local level. It is also not clear from this definition where places and spaces can include virtual domains where communities interact and meet. This could be more explicit, as this is also a growing area of research interest. It is also unclear as to whether this definition includes intangible heritage and culture, which are important aspects of a place, but come with further measurement challenges.

**What are the underlying conditions for thriving communities?** The table below identifies the underlying conditions in a place that are associated with communities that thrive.

These include areas that have:

- lower levels of deprivation
- a population with more children and older people
- rural areas with plenty of green space.

But it also identifies where the active and thoughtful design of place or space can act as an enabler for communities to thrive. This can be achieved by making sure there is:

- good quality housing
- opportunities for physical activity, including walkability of an area
- community hubs and other spaces (including online) where people can interact
- smart neighbourhood design and urban renewal projects that bring people together, as well as ensuring the accessible provision of services.

## Participation, access, and connections

Clearly the conditions in a place, how it is built and what it looks like, matter for its likelihood to thrive. But so does what people do in that place and how it is used. Participation in place-based activities, particularly those that make use of green space and in events is associated with higher individual wellbeing, better relationships and connections as well as people being in the lead.

The evidence clearly identifies the complementarity of the different thematic areas of the thriving community model when understood from a place-based perspective. People have higher wellbeing when they have stronger relationships and connections, particularly as measured by neighbourliness, social cohesion and sense of attachment.

At the same time, participation and engagement in community decision-making can also positively impact individual wellbeing, relationships and connections. The self-reinforcing cycle of active participation and engagement of people in places underpins the connections between the different thematic areas of the Fund's Thriving Communities model.

<p><b>Socio-economic status of a place: Level of deprivation, income and unemployment</b></p>	<p><b>Individual wellbeing:</b> Community-level deprivation is associated with lower levels of individual wellbeing.</p> <p><b>Wellbeing inequalities:</b> Deprivation, unemployment and median income are associated with higher wellbeing inequalities.</p> <p><b>Relationships and connections:</b> Income inequalities in a place have been found to be associated with lower trust in other people Areas with worse deprivation report lower social cohesion and attachment to the neighbourhood</p> <p><b>People-led:</b> Income deprivation is negatively associated with all outcomes in this domain.</p>
<p><b>Population of a place: Demography and transience</b></p>	<p><b>Relationships and connections:</b></p> <ul style="list-style-type: none"> <li>● Areas with more children, old people, and homeowners are perceived to be more neighbourly</li> <li>● A large elderly population is positively associated with the relationships and connections outcome variables.</li> <li>● Areas with more dependent children per household have higher scores on all measures, except safety at dark.</li> <li>● Areas where there are people with an employment status that provides time to be in their neighbourhood – e.g. flexible workers, unemployed adults, parents –scored high on a neighbourliness index.</li> <li>● Households with long-term residency have better connections and support network</li> <li>● Areas with a higher social fragmentation index, which includes measures which capture the transience and dispersion of a place, report lower social cohesion and attachment to the neighbourhood.</li> <li>● Areas where there is a high proportion of commuters or second homes score low on neighbourliness.</li> <li>● Recent migration, language barriers, crime, litter and poor neighbourhood governance are negatively associated with perceptions of neighbourliness</li> <li>● Ethnic diversity is associated with lower neighbourhood belonging, perceived neighbourliness, feelings of safety and having more local friends.</li> <li>● A high proportion of local businesses in an area (i.e. not chains) is associated with higher feelings of safety, but more local businesses is also associated with having fewer local friends.</li> <li>● Resident turnover in the previous year is negatively associated with neighbourhood belonging.</li> </ul> <p><b>People led:</b></p> <ul style="list-style-type: none"> <li>● Commuting long distances is associated positively with volunteering, group membership and activity, political efficacy and even having more local friends.</li> <li>● More ethnically diverse areas have higher engagement in group and organisations, volunteering more and feeling more politically efficacious.</li> <li>● A high proportion of local businesses in an area (i.e. not chains) is associated with greater political efficacy and more volunteering.</li> <li>● Higher resident turnover is positively associated with group membership and activity, and political efficacy.</li> </ul>

<p><b>Physical attributes of a place: Rural/urban, green space, heritage assets and environment</b></p>	<p><b>Relationships and connections:</b></p> <ul style="list-style-type: none"> <li>● Rurality is positively associated with all relationships and connections outcome variables tested, except local friends</li> <li>● Having green and blue spaces where interventions and activities can be delivered can provide opportunities for local people to participate and improve social interactions</li> <li>● More green space means people are more likely to report higher levels of neighbourhood belonging and perceived neighbourliness.</li> <li>● Heritage assets are associated with lower neighbourhood belonging.</li> <li>● Air pollution is negatively associated with neighbourliness, local friends and safety.</li> </ul> <p><b>People led:</b></p> <ul style="list-style-type: none"> <li>● Rurality is positively associated with group activity</li> <li>● Heritage assets were associated with greater political efficacy</li> <li>● Air pollution is negatively associated with political efficacy, group activity and volunteering. [1]</li> </ul>
<p><b>Housing: Quality and provision</b></p>	<p><b>Individual wellbeing:</b></p> <ul style="list-style-type: none"> <li>● Safer and healthier houses have a positive impact on physical health. Examples include interventions to reduce mould and promote good respiratory health and those that tackle fuel poverty.</li> <li>● Housing First, which focuses on moving vulnerable people into independent and permanent housing then providing additional support, increases housing stability and health outcomes, including on mental health.</li> </ul>

**Design and use of physical spaces: Urban design/green and blue spaces, temporary change of use, road use**

**Individual wellbeing:**

- Changes to places and spaces including street design, planters, street play and making spaces more accessible increases the levels of physical activity and other health behaviours. This is the case at the area level
- Relationships and connections:
  - The built environment - particularly accessibility and assets in a place affect the level of social cohesion, neighbourliness and interactions
  - Urban renewal projects can lead to increased social connections, as can community development projects (which may have a physical presence)
  - Making improvements to green and blue space, even temporary changes, can increase social interactions which may lead to increase social networks
  - Neighbourhood design that bring together people from different ages and social backgrounds can positively affect the sense of belonging and social cohesion in a community. Activities can be as small as changing people's porches and gardens to promote social interaction.
  - Some changes in the use of space, even temporarily, can lead to segregation or exclusion of certain groups
  - People who lived in areas with higher rates of road traffic accidents were more likely to feel safe outside in the dark.
  - Having local spaces that support and encourage interactions between users and contribute to a shared sense of identity, are linked to increased relations between neighbours, as well as perceived social cohesion and an attachment to place. Such places can be found in services or places provided by public, private, third sector, even if facilitating connection is not their primary aim for example on public transport or in street design, however shared spaces that do not contribute to building a shared identity do not have a significant impact on social cohesion.
- Community hubs may improve trust, pride in the local area, social cohesion and social mixing by bringing together different groups
- Social Networking Sites can promote a sense of belonging and facilitate the development of supportive relationships for young people
- Green and blue spaces, community development projects and temporary changes to the use of a space can encourage mixing of different cultural and socioeconomic groups
- Walkability of a place was linked to higher levels of trust

**People led:**

- Changes to neighbourhood design and improvements to green and blue space can also increase civic activity
- The walkability of a place was linked to higher levels of participation in community activities
- Changes to Community Hubs can also affect civic participation

<p><b>Place based services and infrastructure: Planning, accessibility, provision, investments and Local Authority Expenditure on community development</b></p>	<p><b>Relationships and connections:</b></p> <ul style="list-style-type: none"> <li>● Urban planning can contribute to the development of social capital through ensuring the co-location of services; planning infrastructure alongside residential growth to ensure there are adequate meeting spaces for social, recreational and educational purposes</li> <li>● Nurseries, schools, well-kept public spaces, health centres and other places that provide support, as well as somewhere people can spend time and meet other people supported a sense of neighbourliness</li> <li>● Diversity of land use, where a commercial and residential land is mixed to encourage routine encounters, positively affects social cohesion by generating positive perceptions and the potential frequency of neighbourly behaviour</li> <li>● Other amenities that can help build social relations between groups include local shops, markets and places to informally trade, as well as extended schools, street parties and internet based local information services</li> <li>● Ensuring accessible streets and transportation can help with accessing places for social interaction</li> <li>● Longer journey times to key services was negatively associated with local friends.</li> <li>● Placing link staff in community buildings such as GP surgeries to link to community activities can reduce loneliness</li> <li>● Having a structured and linked programme of community-led activities can help to prevent and tackle loneliness</li> <li>● People who lived in areas that had received greater funding from charitable foundations had more local friends and felt safer. However, when looking specifically at Big Lottery Fund funding, we found no effect for any outcome variables.</li> </ul> <p><b>People led:</b></p> <ul style="list-style-type: none"> <li>● Longer journey times to key services were associated positively with volunteering and group activity.</li> </ul>
<p><b>Perceptions and experience: Satisfaction with area</b></p>	<p><b>Relationships and connections:</b></p> <ul style="list-style-type: none"> <li>● Satisfaction people have with an area has a relationship with the levels of interaction and mutual support. It is thought that it increases the willingness of individuals to get involved in local organisations and activities</li> </ul>

<p><b>Place based activities: Physical and social activities, heritage activities and use of green space</b></p>	<p><b>Individual wellbeing:</b></p> <ul style="list-style-type: none"> <li>● Health scores of participants on of community connectors improved, through increased socialising, activity levels, improved mood and number of friends. It has helped people who are lonely and isolated to build trust and rapport with other people, which has helped them to increase their self-confidence</li> <li>● Ageing better programme run through 14 different local partnerships found participation has a positive impact on health</li> <li>● Outdoor recreation interventions help families improve their sense of identity through connecting with nature</li> <li>● Wellbeing inequality:</li> <li>● Higher levels of engagement in heritage activities and use of green space is associated with lower wellbeing inequality</li> <li>● Relationships and connections:</li> <li>● Participating in activities and interventions in historic buildings and places can have an impact on a communities' social connections and sense of belonging</li> <li>● Events can provide a "hub" for people to meet which can improve social relations within the community, in particular where they are able to provide a neutral space for different groups to socialise</li> <li>● Learning in communities can help to increase social contact and facilitate connections to the community</li> </ul> <p><b>People led:</b></p> <ul style="list-style-type: none"> <li>● Events and temporary use of space can increase civic activity</li> <li>● Access to historic places and space (and their associated events and activities) has been found to contribute to the collective empowerment of local people</li> </ul>
<p><b>Local relationships</b></p>	<p><b>Individual wellbeing:</b></p> <ul style="list-style-type: none"> <li>● Strength of local relationships, level of neighbourliness, social cohesion and sense of attachment to a neighbourhood can affect wellbeing and quality of life</li> <li>● Feeling a sense of belonging, at a group and community level, enables learning opportunities to impact on wellbeing</li> </ul> <p><b>Relationships and connections:</b></p> <ul style="list-style-type: none"> <li>● Having a sense of "neighbourliness" can contribute to resident's feelings of safety and belonging</li> <li>● Too much bonding and "active neighbourliness" can lead to self-segregation, if people feel their privacy is breached</li> </ul>

<p><b>Community decision making</b></p>	<p><b>Individual wellbeing:</b></p> <ul style="list-style-type: none"> <li>● Being involved in making decisions in the community (to change health behaviours) can have a positive effect on the physical and mental health of both those involved and the wider community, as well as on the social determinants of health.</li> <li>● Collaboration between professional and voluntary workers can improve health outcomes</li> <li>● Young people that were involved in the design and delivery of Talent Match programme activities were more likely to enter education and helped them to develop skills and experience and self-confidence to better work with others in their area</li> <li>● Community decision making processes have been found to have adverse effects, such as consultation fatigue, distress and physical and mental strain</li> </ul> <p><b>Relationships and connections:</b></p> <ul style="list-style-type: none"> <li>● Involving communities in decision making processes, for example citizens juries or saving and enhancing community facilities, can reduce isolation and build social networks.</li> <li>● Involving communities in neighbourhood design projects can potentially improve pride in the area, social relations and social cohesion</li> </ul> <p><b>People led:</b></p> <ul style="list-style-type: none"> <li>● Involving local people in community decisions about how public budgets are spent can help improve the relationship between the community and public agencies and in the longer-term, it can also help to improve civic participation</li> <li>● Participating in community engagement projects can help people to gain confidence to exercise control</li> <li>● Young people getting involved in local activities can offer people the opportunity to develop their skills as part of the co-design and co-delivery of activities. Skills include: teamwork, decision making, leadership and communication. It can also help them to develop their self-confidence</li> <li>● Being involved in the delivery of Community Connect, has been found to slightly affect the perception of community members in being able to influence decisions affecting their area</li> </ul>
<p><b>Community participation: Volunteering</b></p>	<p><b>Individual wellbeing:</b></p> <ul style="list-style-type: none"> <li>● Volunteering can lead to the development of skills and have a positive effect on physical and mental health, including depression</li> <li>● For young people, taking part in community volunteering programmes helped them to develop leadership, communication and organisational skills. When people took on an interesting and varied role in volunteering (outside their own identity), there was an impact on their self-worth. This was particularly pronounced for individuals from vulnerable backgrounds</li> <li>● Older people who volunteer have better health, support role identities, sense of purpose self esteem and quality and quantity of social connections</li> </ul> <p><b>Relationships and connections:</b></p> <ul style="list-style-type: none"> <li>● Volunteering placements for young people found that it helped to increase social connectedness, but this depended on the existing relationships and knowledge that the young person gained from their parents and life experience, as well as the context in which the volunteering took place</li> </ul> <p><b>People led:</b></p> <ul style="list-style-type: none"> <li>● Sports volunteering for young people has been found to result in a positive attitudes and behaviour and encouraged further civic activity</li> </ul>

# 4. RELATIONSHIPS BETWEEN FACTORS AND THEIR RELATIVE STRENGTH

The Fund's initial research questions included to explore 'the inter-relationships between the factors and interventions, including evidence of patterns or sequencing and conditions for success (communities to thrive)':

To answer this, it is necessary to take into account the relationships between the different determinants and outcomes, as well as their relative strength and weaknesses, under different conditions or circumstances.

To best respond, we conducted original data analysis as part of this project. We identified eight different measures of thriving communities, focussing on four measures for self-reported aspects of relationships and connections, and four measures under the people led domain.

Relationships and connections	People led
Neighbourhood belonging	Political efficacy
Perceived neighbourliness	Group activity
Local friends	Group membership
Safe at dark	Volunteering

## Where did these measures come from?

These eight measures all came from wave six of the Understanding Society Survey. This longitudinal household survey interviewed over 45,000 respondents across the UK in 2014 and 2015. This is just a subset of the indicators that can be used to measure the relationships and connections and people led outcomes. They were selected based on their availability in the Understanding Society dataset, and the potential to shed light on gaps in the current evidence base.

We wanted to understand how local-level factors – from ethnic diversity to the proportion of businesses that are owned locally – predicted these eight outcomes. In total, 26 predictors were gathered, data coming from a range of sources, and then linked to the Understanding Society data using geographical markers.

### **The five core variables that predict social capital outcomes**

Of these 26 variables, five defined a 'core model', which was included in all our analyses. These five were chosen because they have been consistently found to predict social capital outcomes in previous research. Additionally, they describe hard-to-change demographic aspects of the community. These are:

- households in neighbourhood with dependent children
- population over 65
- income deprivation
- ethnic diversity
- rurality.

### **Controlling for other variables**

Our analyses also controlled for individual-level factors, such as respondents age or education level, allowing us to identify the unique contribution of local-level factors in determining the eight outcome measures.

As such, the other 21 variables were tested one by one to assess their effects separately. By standardising all the variables considered and employing a consistent methodology, we are able to consider the relative importance of each predictor for each outcome variable (For more information on this analysis, see appendix three).

## **4.1 Determinants of wellbeing have differential impacts on outcome indicators**

Table three presents the findings from the quantitative analysis.

The variables included in the core model significantly predicted several of the outcome variables as displayed on table two. The model found the following.

- Community outcomes increased with age through most of the life course, though they decline again for the oldest respondents. For example, in the case of neighbourhood belonging, the highest scores were for respondents around 75 years old).
- Women, those in relationships and those with dependent children, had better outcomes.
- Areas with lower income deprivation, and more households with dependent children and people over 65, had better outcomes. This is consistent with previous research.
- The pattern for ethnic diversity was mixed, being associated with poorer relationships and connections, but better people led outcomes.
- Rurality was generally positive for relationships and connections, with one exception in terms of the proportion of friends that are local.

Beyond the core variables, all but three of the other predictors tested had a significant association with one or more of the outcomes related to thriving communities. But many of the effects that were found were counter-intuitive, meaning that further research is required to fully understand them.

**Table 3: Results from quantitative analysis:** Summarises the findings for a set of local-level predictors for the eight outcome variables tested.

The colours indicate how much confidence we have in the relationship between the predictors and outcomes based on the level of statistical significance (p values) identified by the model and if that relationship was positive or negative.

The values in the cells are the standardised effect sizes, signifying how much a single unit change in the predictor is likely to change the outcome. All the effect sizes presented here are relatively low as each predictor is just one of a number of factors that will affect each outcome, but the numbers can be compared against each other to provide a sense of how important in magnitude one predictor is compared with another.<sup>208</sup>

208 The following categorical individual level predictors were included in the model but are not included in Table 3 as it is not possible to calculate an overall standardised effect size and they are not the focus of this research: job status, highest qualification, ethnicity.

Table 3: Results from quantitative analysis

Level <sup>209</sup>	Predictor	Relationships & Connections		People Led					
		Neighbourhood belonging	Perceived neighbourliness	Local friends	Safe at dark	Political efficacy	Group activity	Group membership	Volunteering
<b>Individual controls</b>									
Individual	Age	0.548	0.044	-0.137	0.729	-0.048	0.262	0.443	0.106
Individual	Age squared <sup>210</sup>	-0.394	0.047	0.171	-0.927	0.031	-0.159	-0.251	-0.098
Individual	Female	0.064	0.028	0.025	-0.304	0.021	0.002	-0.024	0.011
Individual	Single status	-0.046	-0.029	-0.007	-0.026	-0.013	-0.010	-0.019	0.004
Individual	Number of dependent children	0.072	0.045	0.036	-0.046	-0.005	0.043	-0.004	-0.004
<b>Core model independent variables</b>									
LSOA	Households in neighbourhood with dependent children	0.047	0.029	0.041	0.000	0.002	0.019	-0.008	0.000
LSOA	Population over 65	0.064	0.062	0.026	0.033	0.016	0.036	0.025	0.010
LSOA	Income deprivation	-0.098	-0.191	0.012	-0.126	-0.127	-0.070	-0.070	-0.024
LSOA	Ethnic diversity	-0.039	-0.076	-0.085	-0.078	0.074	0.039	0.032	0.013
LSOA	Rurality <sup>211</sup>								
<b>Other independent variables tested</b>									
MSOA	Resident turnover	-0.026	-0.002	0.017	0.019	0.034	0.031	0.029	0.014
LSOA	Air pollution	-0.020	-0.028	-0.044	-0.028	-0.029	-0.033	-0.019	-0.058
LA	Green space	0.025	0.027	-0.004	0.009	-0.010	-0.008	0.012	-0.007
Ward	Big Lottery Fund spend (log)	0.000	-0.002	0.003	0.005	-0.005	0.002	0.013	0.005
Ward	Other charitable funding (log)	0.006	0.006	0.020	0.017	-0.011	0.010	0.011	0.006
LA	Expenditure for thriving communities	0.028	0.040	0.030	0.025	-0.017	-0.016	0.010	-0.008
LA	Local business	0.014	0.012	-0.019	0.022	0.020	0.013	0.005	0.021
LA	Heritage assets	-0.017	0.005	-0.006	0.002	0.022	0.013	0.003	0.002
MSOA	Schools and other educational bodies (per capita)	0.014	0.029	-0.003	0.040	0.036	0.029	0.025	0.021
LA	Journey times to key services	0.002	-0.004	-0.064	-0.002	0.013	0.022	0.013	0.046
LSOA	Commuting 10-30km	0.018	-0.020	0.029	-0.005	0.011	0.009	-0.002	0.019
LSOA	Commuting over 30km	-0.016	-0.004	0.007	0.004	0.030	0.038	0.021	0.031
LSOA	Road traffic accidents	0.014	0.012	-0.012	0.024	0.016	0.018	0.013	0.008
LA	Income inequality	0.004	-0.007	0.000	0.009	-0.013	-0.003	0.002	-0.004
LA	Unemployment rate	0.010	0.019	-0.007	0.005	-0.013	-0.011	0.006	-0.016
LA	Average group and organisation membership <sup>212</sup>	0.007	0.009			0.030			

Key:

	Positive relationship - p < 0.01
	Positive relationship (marginal) - p < 0.05
	No relationship
	Negative relationship (marginal) - p < 0.05
	Negative relationship - p < 0.01

209 LSOA = Lower Super Output Area - average population 1500, MSOA = Middle Super Output Area - average population 7200, LA = Local Authority (District, Borough, Council area).

210 Age squared was included in the analyses so as to be able to model the fact that age's relationship with the outcome variables may not always be linear. The fact that both age and age squared are often significant indicates that the relationship found was either an upside-down U-shape (i.e. rising and then declining with age) or, in the case of 'local friends', a U-shape (i.e. declining then rising with age).

211 Rurality was coded using a categorical variable with 7 categories.

212 Standardised effect sizes not reported where the relationship is likely to be endogenous.

The following effects were strongest and most consistent, and broadly confirmed expected findings:

- Income deprivation has a negative effect on all eight outcomes, except having local friends.
- Air pollution has a negative effect on six outcomes – neighbourhood belonging and group membership are the only outcomes not affected.
- Local authority expenditure on community development has a positive effect on all four relationships and connections outcomes (expenditure by other charitable bodies only has a positive effect on two of those outcomes).
- The existence of schools and educational bodies has a positive effect on six out of eight outcomes (unaffected are neighbourhood belonging and local friends)
- Ethnic diversity was negatively associated with all relationships and connections outcomes, but positively associated with all people led outcomes.

Some predictors, such as heritage assets and local businesses, have more complicated and harder to explain patterns. They are positively related to some outcomes, but negatively related to others. Resident turnover is important to note – it is negatively associated with neighbourhood belonging, but positively associated with three people led outcomes.

We were unable to replicate previous research that found a link between income inequality and poorer outcomes for relationships and connections.

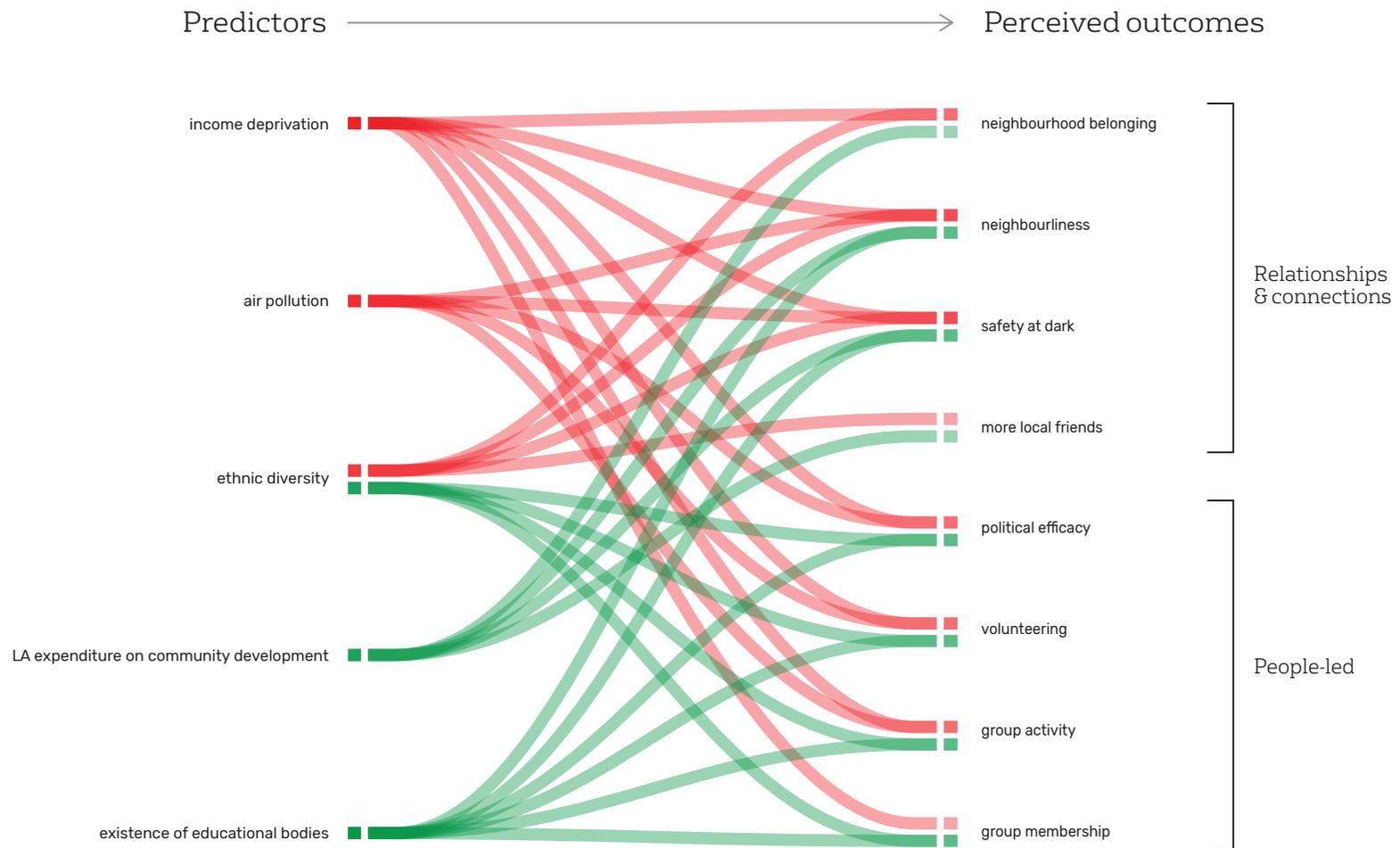
However, it should be noted that our measure of income inequality is not perfect, as it is only inequality in wages, and does not take into account the population without jobs.

A few predictors had entirely unexpected results. Proportions of the population that commute, journey times to key services and rates of road traffic accidents were all positively associated with at least one outcome measure. These findings will be discussed in section 4.4.

## 4.2 Important determinants for different outcomes

To identify the predictors of thriving communities that have the biggest effect, we compared the standardised effect sizes in table three. The predictors with the largest effect sizes have the biggest role in determining the outcomes, relative to the other predictors in the model. The diagram below shows the relative importance of the predictors on outcomes.

This only takes into consideration the predictors that we were able to include in the statistical models. This means it is likely that determinants exist that play a more important role in creating thriving communities that we have not been able to capture in this analysis.



Overall, taking into consideration all of the predictors and outcomes in the analysis, levels of air pollution is the strongest predictor of the largest number of outcomes. It may therefore have a larger contribution to thriving communities than the other determinants. A larger number of schools is also a strong predictor of many of the outcomes.

Further research is required to understand the relationship between levels of air pollution and thriving communities. It is unlikely that air pollution has a direct effect on the outcomes. Air pollution may affect other things that in turn affect whether a community thrives. The impact of air pollution on health should also be considered as a potential explanatory factor.

### 4.3 Investigating interactions between determinants

There is no reason to assume that any given predictor has the same effect on outcomes for all areas or all people. For example, one might expect that the effect of ethnic diversity in a place on our self-reported relationships and connections depends on whether we identified with a majority or minority ethnic group.

#### **Protective effects**

We were interested in exploring such so-called interactions, in particular in the hope of finding 'protective' effects. For example, are there things that can be done that can address the negative relationship between ethnic diversity and relationship outcomes? Or between income deprivation and other outcomes?

There were theoretically over 8,000 possible interactions that could be considered based just on the variables we have considered so far, so a comprehensive analysis of all of them was impossible. As such, we attempted to select a few based on the findings discussed in Sections 4.1 and 4.2, and potentially actionable interventions. We tested six interactions, of which three were found to be significant. These are presented below.

## **Ethnic diversity and local authority expenditure on community development**

Ethnic diversity appeared to have a consistently negative effect on relationships and connections, but we identified another variable that might mitigate this effect: local authority expenditure on community development. It made a difference in the case of perceived neighbourliness, as well as for neighbourhood belonging<sup>213</sup>.

Ethnic diversity has a strong negative effect on perceived neighbourliness, but this effect is greatly reduced when LA expenditure on community development is high. Indeed, when expenditure is high, the difference in perceived neighbourliness between areas that are ethnically diverse and those that aren't becomes minimal. What's more, local authority expenditure appears to make little difference in areas that have low ethnic diversity. These findings are significant and actionable – stressing the importance of targeting community development investment in areas that have low social capital because of their ethnic diversity.

## **Income deprivation and number of schools and other educational bodies**

Income deprivation was one of the most consistently negative predictors of social capital outcomes. We wanted to identify a variable that could mitigate this effect.

While we couldn't find a mitigating variable, we observe from the data that the presence of schools in an area appears to have a positive effect on perceived neighbourliness, which could in some way counter balance the negative effects of deprivation. But this only seems to hold for areas with low income deprivation.

Where income deprivation is high, perceived neighbourliness is low regardless of the number of schools. This highlights the difficulties in overcoming the harmful effects of income deprivation on social capital and where some effects which show up in the general model may not materialise in different contexts.

A similar effect was found on feelings of safety at dark, with the presence of schools and other educational bodies only reducing fear in places with low income deprivation.

These interactions are fascinating in themselves, but also suggest the need for further research using this data set on how to overcome relatively static demographic and socio-economic conditions to improve social capital.

## **4.4 Making sense of some surprising findings**

This new data analysis confirms many previous findings, but also turned up a few surprises.

Three findings stand out as being important clues to helping communities thrive.

1. **The harmful effect of air pollution.** Places with higher levels of air pollution had poorer outcomes. But it is not clear if this is a direct effect of the air pollution itself, or because air pollution is a proxy for something about the urban landscape. For example, air pollution is higher in areas with heavy industry, or areas with busy roads. Both industry and roads have been identified in previous research as breaking down the fabric of an area, creating

213 The interaction between LA expenditure for community development and ethnicity did not mitigate the effect of ethnicity on the other two relationships and connections outcomes: rootedness and safe at dark

'social holes' that harm social capital.<sup>214</sup> It may be these factors, rather than air pollution per se, which the problem. That said, air pollution is known to reduce individual wellbeing, and might also reduce the amount of time people spend outdoors – both factors which might reduce social capital. The two possibilities suggest different solutions.

2. **Local authority expenditure on community development stands out as a strong predictor – but only of relationships and connections outcomes.** This is exciting, suggesting that investments by local government can make a difference.

But it is important to stress that our evidence is not causal. We have simply looked at community development spending in three years preceding Wave six of the Understanding Society Survey, and tested whether it predicted social outcomes at the end of that time.

In theory, it is possible that good social outcomes caused high expenditure in certain local authorities. An immediate test of this would be to compare social outcomes in Wave six with those in Wave three – did the spending result in an improvement in social capital?

It is also worth noting that local authority expenditure is a much stronger predictor of outcomes than charitable funding, though this may be an issue of data quality and consistency – given that data on charitable funding is collected in a less systematic way. Also important, was the finding that local authority expenditure is most beneficial in areas with higher ethnic diversity.

3. **The number of schools and educational bodies in the local area.** We included this indicator as one of three measures of the number of places in an area that can be considered 'social conduits'.

Social conduits are places which provide opportunities for social interaction.<sup>215</sup> A study in Brisbane found a wide range of conduits to be important, including libraries, community centres and restaurants. We were unable to gather the same amount of data that they had for Brisbane, only being to look at three types of place: educational, cultural, and restaurants.

While the effects for cultural social conduits and restaurants were weak, educational conduits were positively associated with all four people led outcomes, as well as perceived neighbourliness and safety after dark. Whether this finding represents a general effect of all social conduits, or a specific effect of educational bodies, requires further research.

It is interesting to note that the benefits of educational bodies are much stronger in areas with low income deprivation. Is it the case that, in areas with high income deprivation, the existence of places that facilitate social interaction is not enough to actually promote such interaction?

214 Corcoran et al. (2018)

215 Wickes et al. (2019)

## Ethnic diversity

The mixed impact of ethnic diversity is fascinating, and adds to the debate about whether ethnic diversity is always a challenge to social capital. Our results suggest that it depends what facet of social capital is under consideration.

Ethnically diverse areas may have lower sense of neighbourliness, and may feel less safe, but they are more civically active and have a greater sense of political efficacy.

The interaction we identified in Section 4.3 between ethnic diversity and local authority expenditure hints at possible solutions for mitigating the negative impacts of ethnic diversity on perceived neighbourliness.

## Residential turnover, commuting, road traffic accidents, and journey time to key services

Perhaps the most surprising set of findings from our study, were the positive effects of residential turnover, commuting, journey time to key services and even road traffic accidents, in relation to some aspects of social capital – particularly within the people led domain.

### We think there are probably three explanations for these counter-intuitive findings.

1. Some of these variables may in effect be proxies for rurality. Commuting (which was measured in terms of distance, not time), journey time to key services and rates of road traffic accidents are all the lowest in urban areas.

We did attempt to control for rurality, but our rurality variable was a categorical variable with just seven categories. Given that continuous variables such as the percentage commuting or the number of road traffic accidents have more possible values, they may provide further variance that can explain the outcome variables in a way that is consistent with a proxy for rurality. In other words, whilst the rurality categories do not distinguish between an area in inner city Camden, and one in outer Hillingdon, the commuting variable, journey time to key services and road traffic accident rates probably do, and in a way that might make it look like the low commuting times and easy access to services that are found in Camden are contributing to low social capital. As such, these three effects should be treated with caution, and a better measure of rurality should be identified.

2. Residential turnover in particular may be a proxy for higher average levels of education, which might explain its positive association with people led outcomes. Higher levels of education were strongly associated with people led outcomes at the individual level – i.e. people with higher levels of education are more likely to feel political efficacy, to volunteer and to be involved in groups and organisations.

Indeed, education is the strongest predictor for many of these variables. It is quite possible that the effect of education diffuses across a local area, such that, even controlling for their own education level, a person is more likely to be involved in group activity or volunteer or feel efficacious if they live in an area with more educated people.

At the local level, turnover strongly correlates with education levels. The local authorities with the highest levels of turnover were Oxford, followed by inner city Hammersmith and Fulham, then Cambridge. Other inner city areas fill the top ranks – places where people with high education levels come to work. Therefore, it may be simply that residential turnover is a proxy for this education level, rather than having a positive effect on people led outcomes per se. This is something that could be easily tested in future research, by controlling for average education levels in each local area.

3. The counter-intuitive finding related to commuting is also worth considering. Commuting has frequently been highlighted as a negative when it comes to individual wellbeing (Section 3.1). But it is possible that the effects of commuting on communities are more mixed.

An economic study in Austria conducted by the OECD noted high levels of wellbeing in a community and identified one of the possible causes being the low levels of residential mobility. People don't move as much as they do in many other countries. One of the reasons for this is that people often do not move for a new job, but rather commute to it, remaining in the community they already live in.

In terms of environmental outcomes, this can be disastrous – for example commuting is incentivised in Austria by making fuel tax deductible. But in other cases – for example very cheap public transport in Vienna – it is not so problematic. The positive effect is that people can remain in their communities. Might it be the case that areas in England with high levels of commuting are partly reflecting this pattern – i.e. these are places where people have chosen to remain in their community rather than move to reduce their commute?

### **Heritage assets, local business and negative social outcomes**

The results offer further conundrums. For example the links between heritage assets and local businesses and social outcomes are not always positive. We found that the existence of heritage assets was negatively associated with neighbourhood belonging, but positively associated with political efficacy. Are heritage assets serving inadvertently as a proxy for something else? Places with higher proportions of locally owned businesses felt safer, had higher levels of political efficacy, but people had fewer friends locally.

Lastly, it is worth reflecting again on the lack of a relationship between spending by The Fund<sup>216</sup> and social capital outcomes, despite the fact that charitable funding in general was associated with a couple of positive outcomes. While this may simply be a consequence of the geographical level of analysis possible, it is also possible that the lack of a relationship demonstrates the effectiveness of the Fund's targeting. Places which have received funding do not have higher social capital outcomes, but it may be because they had even poorer outcomes before they received the funding. Only longitudinal analysis can resolve this question.

216 Data measuring 'Big Lottery Funding' was taken from 2015, when this was the name under which the Fund, now the National Lottery Community Fund was operating. We have kept the reference to Big Lottery Funding for consistency with the data source.



## Limitations

In general, three limitations need to be acknowledged in considering these results.

1. Making causal claims is difficult, because the data is all cross-sectional. It is possible that social capital determines some of the variables we have claimed to be predictors, for example local authority expenditure on community development, or numbers of local businesses. As noted earlier, the only way to resolve this issue is to use longitudinal data looking at change over time for both variables. However, given that only two waves of data exist for most of the outcome measures we are interested in, the possibility to conduct such longitudinal analysis is limited. And anyway, even longitudinal analysis must be treated with caution. Rather than effects being purely linear, it is most likely that relationships are circular.
2. We may not have included enough control variables, as we have discussed in relation to commuting and residential turnover. A better measure of rurality would have been advantageous, as would a measure of educational levels in a local area. Both such measures could be introduced in further analyses.
3. Effects were quite sensitive to the precise sets of controls included in models. Proper sensitivity analyses would be useful in future research to test the robustness of key findings, before changing policies.

# 5. HOW TO MEASURE THRIVING COMMUNITIES

## 5.1 Approach

Here, we bring together relevant and tested measures that can help the Fund to understand thriving communities and to evaluate interventions aimed at helping communities thrive.

We developed a measures bank spreadsheet of existing measures relating to the outcomes and factors identified in the synthesis and data analysis phase of the project, so that the result is a resource that is clearly linked to the existing evidence base identified in the literature review and data analysis and is consistent with the Fund's model for thriving communities.

We searched existing literature for the most relevant and useful measures, building on our existing work in this area, including Happy City's development of the Thriving Places Index and the Happiness Pulse, What Works Wellbeing's Systematic scoping review of indicators of community wellbeing in the UK (2017), and Happy City and WWCW's Understanding local needs for wellbeing data report (2017). We included measures that met the following criteria:

- **Validity:** the measures and indicators should accurately capture what they intend to. We have not carried out additional validity testing, but have referenced the methodology behind the measures or surveys where available.
- **Relation to mapped outcome or factor:** the measures and indicators should relate to an outcome or factor identified in the Thriving Communities model. This means that the measures cover the range of subjective experiences, attitudes, behaviours and conditions that are in play in communities.
- **Used in existing surveys or research:** as far as possible the measures should have been used in academic or social research to understand community wellbeing. If data is collected regularly on these measures, providing potential benchmarks for projects, this has been indicated.

Sometimes this data is available at a local level, but more usually it is available at a national or regional level. Some of the data from these surveys is more easily accessible than others – such as the Community Life Survey – so we have prioritized those sources.

- **Useful in project evaluations:** as far as possible the measures should be useful in evaluating the effectiveness of grant funded projects. This means that they should be in the form of a survey question that could be asked of a project beneficiary, or an indicator which could be captured by a project.

However, this doesn't mean all indicators will be relevant for all funded projects – both for practical and methodological reasons. The inclusion of these indicators is intended to give the Fund a set of common measures to recommend across projects and enable the Fund to compare outcomes across interventions. However,

The result is not intended to be a self-contained index of Thriving Communities, but rather a starting point of relevant measures to develop a more cohesive and meaningful resource for the Fund's many research priorities.

The measures included capture a mix of objective factors and subjective experiences, which together can help explain a thriving community. However, because objective data (especially around factors or determinants) is more easily captured and has been historically valued, this type of measure is more likely to have data available for benchmarking. This doesn't mean that it is more important than the subjective measures, so both are included in the bank.

## 5.2 Limitations

There are a number of important limitations to this bank of measures. The most essential ones relate to the issues of the Thriving Communities model itself. These issues and their effects on a measures bank are:

- The intended use of the measures bank. The indicators and measures needed are likely to be different for different purposes. If the intention is to understand which places are thriving then there will be a need for an index that covers all communities and allows for comparison (such as Happy City's Thriving Places Index, or the Co-op Foundations Community Wellbeing Index). However, if it's more important to know whether a project has had an effect on its beneficiaries these holistic comparisons may not be necessary, and instead a reasonably robust and targeted survey question is more practical.
- The lack of stated level at which outcomes and determinants should be measured. The geographical area of 'communities' is not explicitly stated, and indeed it is likely to be different in different contexts and for different populations. However, we could assume that communities occupy the space between neighbourhoods, wards and local authorities or towns.

The relevant data and indicators are generally split between objective measures (of determinants and some outcomes) which are currently available at local authority level, and subjective indicators (of outcomes around attitudes, beliefs and behaviours) which are mainly available at a national or regional level because of the small survey sample sizes. Very few indicators are available at neighbourhood level across the country.

Because of this, we focused on the most relevant measures, without ruling out those that are not available locally. This is one of our reasons for including many of the Community Life Survey questions – they are not available at a local area, but as a survey they measure many of the behaviours, attitudes and beliefs that enable thriving communities.

- The inherent complexity of thriving communities. The model assumes that some conditions (such as an availability of suitable public spaces) are a sign of thriving communities themselves, rather than leading to an outcome. This means that in some circumstances it will be more appropriate to measure a determinant, and in others it will be more appropriate to measure an outcome that it enables.

Measures are in English and are suitable for use in adults (mainly over 16 years old). Where similar measures exist for children, in simpler language, or in languages other than English we have pointed this out. However, the searches were not intended to find these measures directly.

## 5.3 Existing frameworks and measures of community wellbeing

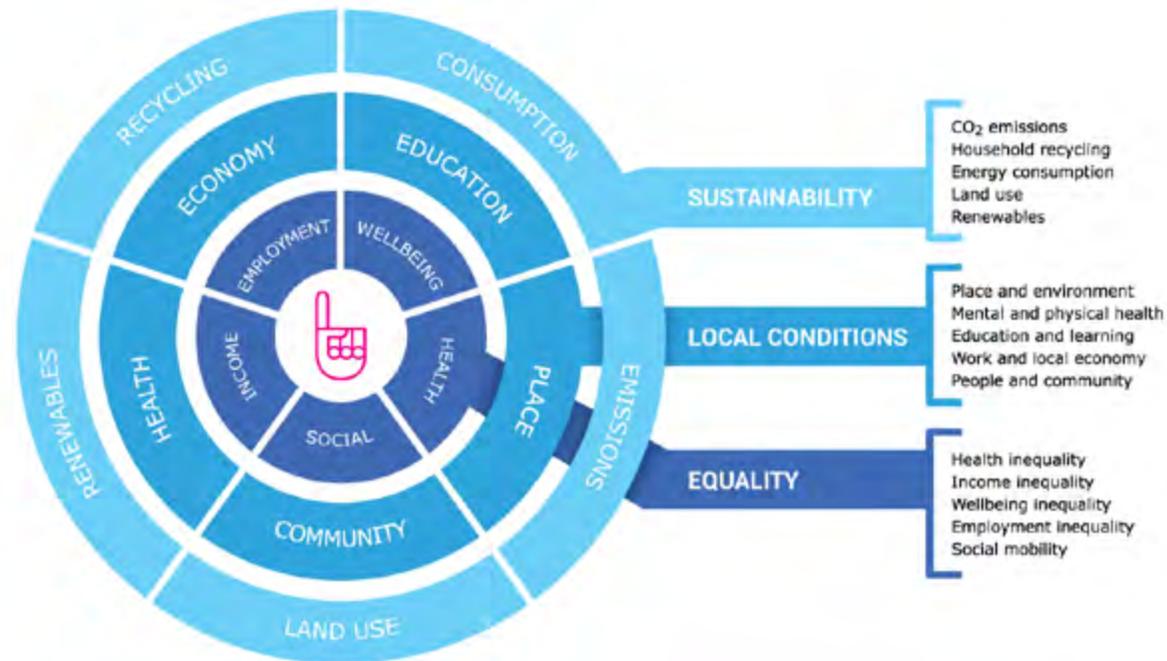
There are a number of existing measurement frameworks developed to understand community wellbeing for academic, policy and practice. These differ primarily in their conceptualisation of community wellbeing, and in the purpose of the frameworks. Some of these may cover areas of the Thriving Communities model in more detail, or have more pragmatic but more accessible indicators than the ones proposed by this research.

What Works Wellbeing's academic partners at Leeds Beckett University carried out a scoping review of frameworks and indicators of community wellbeing which brings together these and other resources and analyses trends and common topics. In 2017 this project found 43 indicator sets, comprising 273 raw indicators of community wellbeing, showing the popularity of the topic but also the diversity of concepts and measures associated with it. In the two years since that report a number of new frameworks and measures have been developed.

The most useful frameworks are:

- Happy City's Thriving Places Index:** This index is designed to provide a robust reporting framework that shows whether the conditions are in place for people to thrive at a local level, including sustainability and fairness. Data or around 60 indicators is available for England and for Wales, and updated annually.

Where a recommended measure is featured in the Thriving Places Index we have indicated this for ease of referencing and benchmarking.



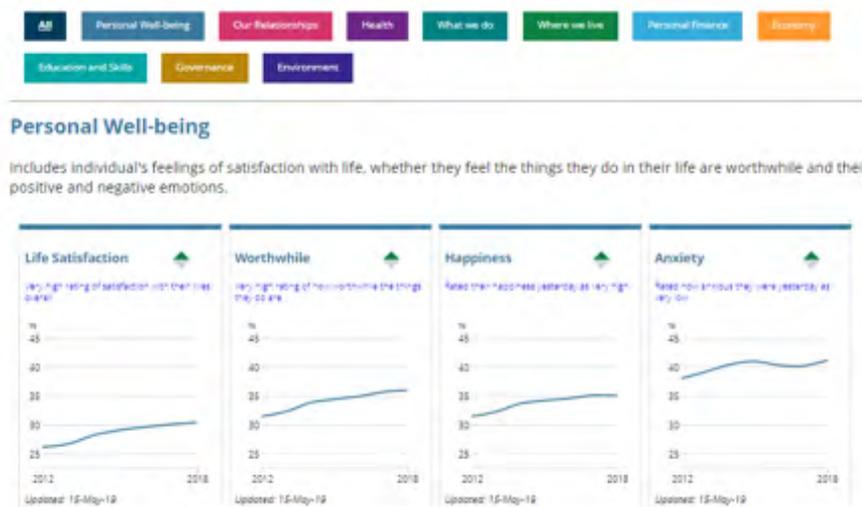
- **Happy City's Happiness Pulse:** an online survey tool to measure individual wellbeing, including mental and emotional wellbeing, behavioural wellbeing, and social wellbeing. It is a ready-to-go survey which can be used by individuals but also by local authorities or charities in project evaluations. A number of supplementary modules are available and in development, and Happy City provides additional levels of support for multiple projects or deeper insights.

Where a recommended measure is featured in the Happiness Pulse we have indicated this.

- **ONS Measuring National Well-being Dashboard:** provides a visual overview of the data in the National Well-being Framework and can be explored by the areas of life (domains) or by the direction of change. It supports the Measuring National Well-being programme which provides a more detailed look at life in the UK. The full set of headline measures of national well-being are organised into 10 areas, such as health, where we live, what we do and our relationships. The measures include both objective data and subjective data.

Where a recommended measure is featured in the Measuring National Well-being (MNW) dashboard we have indicated this for ease of referencing and benchmarking.

- Other relevant measurement frameworks and emerging work are:
  - Co-op Community Wellbeing Index
  - OECD Social Capital measures bank
  - ONS Social Capital measures [note that these indicators are currently undergoing harmonisation and factor analysis and are likely to change]
  - WHO scoping report on measures of health-related community resilience



## 5.4 How to use the measures bank and areas for potential development

In order to prioritise and refine the recommended measures for the Thriving Communities Model, it's necessary to better understand the users of this resource. Programme or project evaluators are likely to need different measures from grant managers or community groups.

When used in evaluations these measure should be used in conjunction with a project or programme theory of change, and with a hypothesis of how long the benefits are likely to take to be realised. There is not agreed common approach to when in the course of a project these indicators should be measured, but they are mostly suitable for pre-and-post evaluations.

These measures are not intended to be used to filter beneficiaries for access to services, although many of them (especially the objective indicators) can be used to understand which communities or groups might benefits most from investment or from different types of interventions.

Some key outcomes from the Thriving Communities Framework don't have a readily available measure or indicator. Primarily this is because there is still conceptual disagreement about the outcome or how to measure it. However, Happy City are developing a number of additional modules for their Happiness Pulse and new indicators or models for outcomes within the Thriving Places Index which could help fill these gaps in the future.

- Some of these outcomes or topics are:
- Resilience (both personal and community)
- Diversity, inclusion
- Pride in place or community
- Walkability
- Social action
- VCSE robustness
- Some pro-social behaviours like kindness and altruism

## CASE STUDY: Measuring Thriving Communities in Birmingham & Solihull

Measuring progress towards Thriving Communities is a complex multi dimensional task. Happy City have been working with local governments, funders, and community projects around the country to help support a joined up approach to measuring impact towards this goal at the individual, project, community, place and societal level.

One example of this work is currently taking shape across Birmingham and Solihull in the West Midlands. The Active Wellbeing Society is delivering a major three year programme funded by Sport England, to increase levels of physical activity across the region, particularly within more economically deprived, or socially excluded communities.

Instead of taking a simplistic approach to measuring impact using only traditional metrics such as numbers of participants and GP visits, the programme is using Happy City's Thriving Places Index (TPI) as a shared set of goals for the 180+ partners across the region, and way to frame overall social impact. By encouraging projects to track one or more of the 60+ indicators in the TPI, they are able to assess project contribution to wider city and area changes in the significant areas of health, education, economy, community and place – with the Local Authority level data already gathered, tested and published annually via the TPI.

Then, to assess project contribution to the vital individual and community wellbeing they seek to improve, they are also tracking all projects, and all participants in projects using a bespoke version of Happy City's Pulse tool (600+ users to far). By doing so they will be tracking the impact of their projects not just on the levels of physical activity of participants, but on elements such as their sense of belonging, self worth and trust, their engagement with the community, levels of social connections and support.

Together these two measures of thriving communities provide a clear example of the power of the right indicators, used in the right People led ways, to transform the ambition, impact and value of funded projects on the ground.

NB – the first data from this programme should be available in late 2019 or early 2020.



## 6. RESEARCH GAPS AND NEXT STEPS

**This research project has identified a number of research questions and gaps in the evidence which will need to be filled before the overarching ambitions of this work can be fully met. These include very broad topics of research as well as specific questions on certain outcomes or interventions. Some of the questions are about the Thriving Communities model itself, and how certain elements or concepts can be clarified or developed further.**

The questions will need to be answered through a variety of different types of research – including further quantitative data analysis, systematic or literature reviews, evaluations of projects and programmes, and large-scale trials. The Fund could consider how some of these questions could be answered through the lessons learned from their own project portfolio and methodologies that could facilitate this, such as including elements of ‘controls’ in what and how they grant manage to enhance what can be learned from project evaluations.

We have set out the emerging research gaps and our views on why these are particularly relevant to supporting the Thriving Communities Model, as well as how we think they may be answered.

## Concepts and Thriving Communities model

Question or topic	Research methods
How does Thriving Community model differ from community wellbeing, and how does it relate to other concepts (by funders, policy makers and academics)? Why: to avoid conflicting messages to the public about the topic, and to provide a shared language for the sector which has a robust basis	Conceptual review and discussion
What does the 'People led' theme encompass, is this an approach, a determinant or an outcome and what kind of leadership is not included from the Fund's perspective? Why: some aspects of leadership are important for thriving communities but may be excluded from the Fund's thinking because they cannot be funded (eg. political participation)	Internal review and discussion
What is meant by individual resilience, and how should it be measured to understand thriving communities? Why: there is still lack of agreement about what constitutes individual (or community) resilience.	Conceptual review and discussion
What does inclusion mean in the thriving communities model, and how should it be measured? Why: Inclusion of some people can be experienced as exclusion by others, and can be associated with aspects of diversity and the distinction between bonding and bridging capital.	Conceptual review and discussion
How can the model accommodate context specificity? Why: Context matters, the model may need to be adapted based on the conditions and priorities identified within a community	Conceptual review and discussion
At what level does the apply in its definition of 'community' Why: Community can be interpreted to be as small as a family, or as large as a nation, defined by geography or special interests. The evidence on determinants and their effects may differ depending on this definition.	Conceptual review and discussion

## Mechanisms and thriving as process

Question or topic	Research methods
What are the protective or risk factors involved in thriving communities?	
Sequencing and order effects: Are there sequences of specific activities that contribute to the theme outcomes or the factors that contribute to thriving communities? Why: There is very little evidence in the reviews of things that need to be in place, or components of projects that contribute to a sequence of outcomes	Longitudinal analysis; evidence collection from areas with long-term funding
Interrelations and causes: What is the nature of the relationship between the different variables related to thriving communities? What are the causal relationships between variables? Why: would take into account the complex relationships between variables associated with thriving communities – treat it as a system. Would take into account the interrelationships and allow for bidirectional relationships. Get a sense of which are the key drivers which need to precede other outcomes.	Possibly Network modelling or path analysis of quantitative data. <a href="https://www.thoughtco.com/path-analysis-3026444">https://www.thoughtco.com/path-analysis-3026444</a> Analysis of longitudinal data.

## Focus on 'Individual wellbeing and resilience'

Question or topic	Research methods
<p>Financial uncertainty: What are the effects on wellbeing and resilience of different aspects of financial uncertainty (precarious income, debt, sudden shocks, future income projections etc) and how can these be mitigated?</p> <p>Why: Income deprivation matters for individual wellbeing, but existing evidence tell us little about particular aspects of financial uncertainty and debt and the mechanisms through which they affect wellbeing.</p>	Literature review, data analysis
<p>Trust: What works to build trust in others, institutions and in general and how does this in turn enhance individual wellbeing?</p> <p>Why: Trust can be considered an outcome, but can also be a predictor of other outcomes generating spillover effects for other aspects of individual wellbeing and creating a positive cycle for achieving a high trust thriving community equilibrium.</p>	Conceptual review, literature review, data analysis
<p>Belonging: How does a sense of belonging enhance individual wellbeing and at what level (family, community, country) is it most important for who?</p> <p>Why: Belonging can be considered an outcome, but can also be a predictor of other outcomes generating spillover effects for other aspects of individual wellbeing and creating a positive cycle for achieving thriving communities where people have a strong sense of belonging. But as communities change and evolve and exist at multiple levels, how can a sense of belonging be fostered and maintained at the most important levels?</p>	Conceptual review, literature review, data analysis
<p>Loneliness: What works to alleviate loneliness for young and middle aged people? How do transitions across the lifecourse affect this relationship?</p> <p>Why: We don't know how loneliness and individual wellbeing are linked, or how it relates to resilience. The relationship between loneliness and resilience across different ages is important since adapting to different levels/qualities of social connection is something that happens during transition points such as moving between studying and employment, and the 'skills' needed are important throughout life).</p>	Literature review, data analysis, experimental evidence

## Focus on 'Relationships and connections'

Question or topic	Research methods
<p>Pro-social norms: what's the effect of socially reinforced behaviour (kindness, altruism, co-operation) on outcomes? Do some people benefit more than others, and is burden equally distributed across population?</p> <p>Why: there is an assumption that these behaviours are positive, but some groups may be more burdened by them or have greater social expectations to display them (eg women, disabled people, ethnic minorities).</p>	Literature review, data analysis
<p>Participation: what's the effect of informal volunteering / community contribution on outcomes?</p> <p>Why: Most of the evidence comes from formal volunteering.</p>	Conceptual review; literature review; empirical data collection within communities that the Fund has longer term projects in.
<p>Social bridging: what factors need to be in place to enable social bridging (meaningful social mixing)? What predicts the likelihood that people have friends of different races? Who benefits and who is harmed by mixing?</p> <p>Why: Evidence from the literature review showed that shared presence was not enough for bridging capital; some evidence was presented which looked at building shared identities within shared spaces.</p> <p>There is an assumption that mixing is always good, or that some types of mixing are important (inter-ethnic, inter-generational). Is this assumption borne out, and are some people more likely to benefit from social bonding than social mixing? The data analysis showed a very complicated picture of outcomes from different types of mixed friendship groups.</p>	Literature review, data analysis, evaluation evidence

## Focus on 'People led'

Question or topic	Research methods
<p>Who leads: what is the role of the 'civic core' (those routinely engaging in volunteering, charitable giving and civic participation) in enabling thriving communities?</p> <p>Why: will help to understand the role and value of the key individuals who prop up community projects, what motivates them and how their number can be increased.</p>	Data analysis, literature review
<p>Inclusion: What enables inclusion in communities?</p> <p>Why: The evidence reviewed did not have a focus on what works in increasing inclusion. There was some evidence from process evaluations on what didn't work.</p>	Literature review, evaluations

## Focus on 'Places and Spaces'

Question or topic	Research methods
<p>Services: more clarity on the concepts of "access"/ "opportunities"/ "services".</p> <p>Why: More evidence needed on access to services. Current evidence base focuses on health and statutory services. The type of service, their funding and how they are managed and run are important intervention areas for local authorities and non government agencies. Optimizing money spent could have significant impacts.</p>	Literature review, data analysis, cross country studies
<p>Walkability: How can this be enhanced and what is the empirical relationship between various wellbeing outcomes?</p> <p>Why: Walkability has the potential to achieve multiple thriving community benefits, from individual physical health, to enabling more social interactions and improving environmental outcomes in a place. Evidence to support the business case for interventions that enhance walkability may have multiple benefits.</p>	Literature review, theoretical models, experimental evidence
<p>Are there specific places and spaces that encourage civic activity?</p> <p>Why: The evidence that we reviewed provided some high level information about the role of community hubs and historic places contributing to civic engagement and making decisions. However there was some conflicting information from the Corcoran paper about the role of green space in reducing social action.</p>	Literature review, possibly to also include digital spaces which often complement physical projects in communities, as this was not covered in detail in the review.
<p>Who owns spaces: Does the ownership of community spaces matter to their effect on thriving community outcomes? For example – public space / council owned, charities, private, shared ownership, asset transfer.</p> <p>Why: could help direct funding to support different business models.</p>	Evaluations
<p>Social conduits: what is the role of social conduits (places which provide opportunities for social interaction) on thriving communities?</p> <p>Why: studies from Brisbane show libraries, community centres and restaurants to be important, but analysis was not possible with similar data. A different approach and a wide net could identify unexpected assets and connections and help target investment.</p>	Spatial mapping and data analysis (check Co-op Community Wellbeing Index data)

## Focus on other factors

Question or topic	Research methods
<p>Does NLCF funding have an effect on the model outcomes when measured at MSOA level (versus ward level)? Why: When measured at ward level no grant funding seems to have an effect.</p>	<p>Data analysis</p>
<p>Local conditions: do people's outcomes change when they move to places that have more conducive local conditions? Why: This could provide some test of the causal effect of local conditions on individuals. On a community level, resident turnover was negatively associated with neighbourhood belonging, but positively associated with three People led outcomes.</p>	<p>Data analysis: Can be done using data from USOC, looking at people who have moved between Wave 3 and Wave 6, comparing their social outcomes and the local conditions in the place they moved from and the place they moved to.</p>
<p>Air pollution: Why is air pollution associated with poorer social capital outcomes? Why: Air pollution has been one of the most consistent predictors of poor social outcomes. Is it because it somehow genuinely directly effects social capital, or is it a proxy for something about the urban landscape? Or other poverty issue?</p>	
<p>Commuting: Test robustness of the surprising effects of commuting and residential turnover, found in data analysis</p>	<p>Carry out similar analysis, but control better for rurality and education level in the local area</p>

# REFERENCES

- Abdallah et al. (2017) What drives wellbeing inequality at the local level across Great Britain? What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/drivers-of-wellbeing-inequalities-briefing/> [Accessed 09.07.19]
- Anderson et al. (2019) Bringing people together: how community action can tackle loneliness and social isolation. Insights and examples from the community and voluntary sector. The National Lottery Community Fund (London). Available at: [https://www.tnlcommunityfund.org.uk/media/Bringing-people-together-how-community-action-can-tackle-loneliness-and-social-isolation\\_PDF-1MB.pdf?mtime=20190612160100](https://www.tnlcommunityfund.org.uk/media/Bringing-people-together-how-community-action-can-tackle-loneliness-and-social-isolation_PDF-1MB.pdf?mtime=20190612160100) [Accessed 09.07.19]
- Bagnall et al. (2017) Systematic Scoping Review Of Reviews Of The Evidence For “What Works To Boost Social Relations” And Its Relationship To Community Wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/social-relations-and-wellbeing-scoping-review/> [Accessed 09.07.19]
- Bagnall et al. (2018), Places, spaces and wellbeing: full review. A systematic review of interventions to boost social relations through improvements in community infrastructure. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/places-spaces-people-and-wellbeing/> [Accessed 09.07.19]
- Bashir et al. (2018) Talent Match Evaluation: Involving Young People, National Lottery Community Fund. Available at: <https://www.tnlcommunityfund.org.uk/media/insights/documents/talent-match-eval-involving-young-people.pdf?mtime=20190409100856> [Accessed 09.07.19]
- Big Lottery Fund (2018) Ageing Better: Achievements and learning from project delivery to date. National Lottery Community Fund. Available at: [https://www.tnlcommunityfund.org.uk/media/insights/documents/BLF\\_KL18-07\\_Ageing\\_Better\\_Briefing.pdf?mtime=20190613150030](https://www.tnlcommunityfund.org.uk/media/insights/documents/BLF_KL18-07_Ageing_Better_Briefing.pdf?mtime=20190613150030) [Accessed 09.07.19]
- Big Lottery Fund (2018b) Talent Match: Achievements and lessons for policy and programme design. National Lottery Community Fund. Available at: [https://www.tnlcommunityfund.org.uk/media/insights/documents/BLF\\_KL18-02\\_Talent\\_Match\\_Briefing.pdf?mtime=20190523151524](https://www.tnlcommunityfund.org.uk/media/insights/documents/BLF_KL18-02_Talent_Match_Briefing.pdf?mtime=20190523151524) [Accessed 09.07.19]
- Big Lottery Fund (2018c) Preventing serious youth violence – what works? Insights and examples from the community and voluntary sector. National Lottery Community Fund. Available at: [https://www.tnlcommunityfund.org.uk/media/insights/documents/BLF\\_KL18-12-Serious-Violence.pdf?mtime=20190523162211](https://www.tnlcommunityfund.org.uk/media/insights/documents/BLF_KL18-12-Serious-Violence.pdf?mtime=20190523162211) [Accessed 09.07.19]
- Binder (2013) Volunteering, subjective well-being and public policy. *Journal of Economic Psychology*
- Bradbury and Kay (2008). Stepping into community? The impact of youth volunteering on young people’s social capital. *Sport and Social Capital*, Chapter: 13, Publisher: Butterworth-Heinemann, Editors: Matthew Nicholson, Russell Hoyer, pp.285-316
- Buonfino (2006) Neighbouring in contemporary Britain. A think piece for the Joseph Rowntree Foundation Housing and Neighbourhoods Committee. Joseph Rowntree Foundation.
- Chambers et al. (2018) Systematic review of the evidence on housing interventions for ‘housing-vulnerable’ adults and its relationship to wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/housing-for-vulnerable-people-briefing/> [Accessed 09.07.19]
- Clark et al. (2017) *The Origins of happiness*. Princeton University Press
- Corcoran et al. (2018) Neighbourhood land use features, collective efficacy and local civic actions. *Urban Studies* 55(11) 2372–2390
- Curtis et al. (2019) Individual and local area factors associated with wellbeing, perceived social cohesion and sense of attachment to one’s community. What Works Centre for Wellbeing (forthcoming)
- Daniels et al. (2017) Job Quality and Wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/job-quality-and-wellbeing/> [Accessed 09.07.19]
- Daniels, Watson et al. (2017) Team Working. What Works Centre for Wellbeing (London) Available at: <https://whatworkswellbeing.org/product/team-working/> [Accessed 09.07.19]
- Dartington Service Design Lab (2019) The Socio-Economic Participation Gap in Youth Social Action. National Lottery Community Fund. Available at: <https://www.tnlcommunityfund.org.uk/media/insights/documents/The-Socio-Economic-Participation-Gap-in-Youth-Social-Action.pdf?mtime=20190523145431> [Accessed 09.07.19]
- Daykin et al. (2016) Music, singing and wellbeing in adults with diagnosed conditions or dementia. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/music-singing-and-adults-with-diagnosed-conditions/> [Accessed 09.07.19]
- Daykin, Julier et al. (2016). Music, singing and wellbeing in healthy adults. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/music-singing-and-healthy-adults/> [Accessed 09.07.19]
- Fairbrother and Martin (2012) Does inequality erode social trust? Results from multilevel models of US states and counties. *Social Science Research* 42 (2013) 347–360

- Gedikli et al. (2017) Unemployment, (re)employment and wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/unemployment-reemployment-and-wellbeing/> [Accessed 09.07.19]
- Gedikli et al. (2018) Finding and keeping work: impact of low wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/finding-and-keeping-work-impact-of-low-wellbeing/> [Accessed 09.07.19]
- Gedikli, Bryan et al. (2017) Retirement and wellbeing What Works Centre for Wellbeing (London) Available at: <https://whatworkswellbeing.org/product/retirement-and-wellbeing/> [Accessed 09.07.19]
- Gedikli, Bryan et al. (2018) Work progression and job security. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/work-progression-and-job-security-briefing/> [Accessed 09.07.19]
- Greenfield and Marks (2004) Formal volunteering as a protective factor for older adults' psychological well-being. *The Journals of Gerontology* 2004 Sep;59(5):S258-64.
- Hole (2011) Loneliness compendium: Examples from research and practice. Joseph Rowntree Foundation
- IVAR (2015) A Better Start Evidence Review: Report to Big Lottery Fund. National Lottery Community Fund. Available at: <https://www.tnlcommunityfund.org.uk/media/insights/documents/2015-A-Better-Start-Evidence-Review.pdf?mtime=20190409110012> [Accessed 09.07.19]
- Jenkinson (2013) Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers. *BMC Public Health*. Available at: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-13-773> [Accessed 09.07.19]
- Mansfield et al (2018) Dance and sport: A systematic review of sport and dance participation in healthy young people (15-24 years) to promote subjective wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/dance-and-sport-evidence-briefing/> [Accessed 09.07.19]
- Mansfield et al. (2018). Family and Outdoor recreation. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/family-and-outdoor-recreation/> [Accessed 09.07.19]
- Mazumdar et al. (2017) The Built Environment and Social Capital: A Systematic Review. *Environment and Behavior*, 50(2), 119–158.
- Mennis et al. (2013) Neighborhood collective efficacy and dimensions of diversity: a multilevel analysis. *Environment and Planning A* 2013, volume 45, pages 2176 – 2193
- Mohan and Bulloch (2012) The idea of a 'civic core': what are the overlaps between charitable giving, volunteering, and civic participation in England and Wales? TSRC (Birmingham). Available at: <https://www.birmingham.ac.uk/Documents/college-social-sciences/social-policy/tsrc/working-papers/working-paper-73.pdf> [Accessed 09.07.19]
- Mujicic, Oswald (2016) Evolution of Well-Being and Happiness After Increases in Consumption of Fruit and Vegetables. *American Journal of Public Health*
- ONS (2018) Understanding well-being inequalities: Who has the poorest personal well-being? ONS (Online) Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/understandingwellbeinginequalitieswhohasthepoorestpersonalwellbeing/2018-07-11> [Accessed 09.07.19]
- Pennington et al. (2017) Scoping review of review-level evidence on co-production in local decision-making and its relationship to community wellbeing. What Works Centre for Wellbeing (London) Available at: <https://whatworkswellbeing.org/product/scoping-review-local-decision-making-and-community-wellbeing/> [Accessed 09.07.19]
- Pennington et al. (2018) A systematic review of evidence on the impacts of joint decision-making on community wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/joint-decision-making-briefing/> [Accessed 09.07.19]
- Pennington et al. (2019) Heritage and wellbeing: The impact of historic places and assets on community wellbeing – a scoping review. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/heritage-and-wellbeing-full-scoping-review/> and <https://whatworkswellbeing.org/product/heritage-and-wellbeing-briefing/> [Accessed 09.07.19]
- Stoll et al (2012) Well-being evidence for policy: A review. New Economics Foundation (London). Available at: [https://b3cdn.net/nefoundation/10b8aab90c5771ff9\\_a0m6bvv5a.pdf](https://b3cdn.net/nefoundation/10b8aab90c5771ff9_a0m6bvv5a.pdf) [Accessed 29.07.19]
- Tay et al. (2016) Debt and Subjective Well-being: The Other Side of the Income-Happiness Coin. Springer (Netherlands). Available at: <https://link.springer.com/article/10.1007/s10902-016-9758-5> [Accessed 09.07.19]
- Tomlinson et al. (2018) Visual art and mental health. What Works Centre for Wellbeing (London) Available at: <https://whatworkswellbeing.org/product/visual-arts-and-mental-health-briefing/> [Accessed 09.07.19]
- Van Willigen (2000) Differential Benefits of Volunteering Across the Life Course. *The Journals of Gerontology: Series B*, Volume 55, Issue 5, 1 September 2000, Pages S308–S318
- Victor et al. (2018) What do we know about tackling loneliness. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/tackling-loneliness-full-review/> [Accessed 09.07.19]
- Watson et al. (2018) Barriers to Learning. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/barriers-to-learning/> [Accessed 09.07.19]

Watson, Tregaskis et al. (2017) Learning at Work. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/learning-at-work/> [Accessed 09.07.19]

Watston et al. (2017) Adult learning. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/adult-learning-briefing/> [Accessed 09.07.19]

Wells and Pearson (2018) Progression to Employment: Lessons from the Talent Match programme evaluation. National Lottery Community Fund. Available at: <https://www.tnlcommunityfund.org.uk/media/insights/documents/progression-employment-summary-report.pdf?mtime=20190409094530> [Accessed 09.07.19]

Wickes et al. (2019). Neighbourhood social conduits and resident social cohesion. *Urban Studies* 2019, Vol. 56(1) 226–248

Williams et al. (2018) Ageing Better: Learning Report No. 2 - Community Connectors. National Lottery Community Fund. Available at: [https://www.tnlcommunityfund.org.uk/media/insights/documents/prog\\_fulfilling\\_lives\\_ageing\\_better\\_learning\\_report\\_2.pdf?mtime=20190408144001](https://www.tnlcommunityfund.org.uk/media/insights/documents/prog_fulfilling_lives_ageing_better_learning_report_2.pdf?mtime=20190408144001) [Accessed 09.07.19]

# APPENDIX A:

## Outcomes and determinants mapping

### NLCF Thriving Communities: Initial interpretation of indicators and mapping of sources of literature

Outcomes: NLCF's theme and narrative description	Outcome indicators
1. Individual Wellbeing (and Resilience): People are enabled to live fulfilled lives	
1.1 Being physically and mentally well	Physical Health Mental Health
1.2 Having opportunities to develop skills, enabling people to achieve their goals	Education & learning Informal learning & skills training Training (work) Competency
1.3 Having the financial and emotional resilience to overcome challenges	Employment Debt Financial wellbeing
1.4 Relationships	Marital status/partner Someone to rely on
1.5 Flourishing	Self confidence Sense of identity WEMWBS Purpose Pleasure Affect positive/negative Life satisfaction Feeling competent (able to use abilities)
2. Relationships and Connections: People and communities connect with, understand and support one another	
2.1 People have positive social connections with other people and groups and are not lonely or isolated	Sense of belonging Neighbourliness Loneliness/isolation Social mixing Social bonding (part of social relations otherwise) Social relations (when components not separated out)

2.2 People and communities have trust in one another, which enables them to form supportive networks and have collective strength	Generalised trust Social cohesion VCSE robustness Social support Kindness Altruism Pride Social capital
3. People led: People are meaningfully involved in matters that affect their lives and communities	
3.1 Being able to influence matters that are important to you and your community	Participation (political) Civic engagement Social action (campaigns) Petitions Co-produced services
3.2 Having access to opportunities and resources, such as jobs, services and facilities, which enable people and communities to make the most of their strengths	Access to services Volunteering Access to local assets (cultural/ heritage)
3.3 All members of the community being fully included and supported to ensure they have an equal voice	Inclusion Diversity
Determinants: NLCF theme, + other	
A. Places and Spaces: Communities have [physical] places and spaces that they can use to make good things happen	
4.1 A built and natural environment that enables wellbeing, that is sustainable and that brings people together	Green and blues spaces (Quality of environment) Public space (e.g. bumping spaces) Walkability Quality/accessibility of transport
4.2 Places and spaces that foster a shared sense of belonging in the community and in which everyone feels safe	Heritage assets Feeling safe Physical cohesiveness
B. Other factors/conditions:	
Individual level (protected characteristics and things that individual's do/experience)	Age and household composition Percentage commuting elsewhere for work Subjective assessment of shopping and leisure facilities Subjective access to services Participation in heritage activities

<p>Local level (local level variables that can affect wellbeing and that vary between different communities)</p>	<p>Economic deprivation  Unemployment rate  Green land cover  Crime rates (or Crime Severity Score)  Economic inequality  Ethnic diversity  Resident turnover  Levels of group/organisation membership (also possible outcome, at individual level)  Voter turnout (also possible outcome)  Volunteering rates (also possible outcome)  Diversity (ethnic) of local councillors  Access to services</p>
<p>Macro level (determinants that affect more than one place/community, often determined by national level policies and macro environmental conditions) Macro/national level</p>	<p>Economic deprivation  Unemployment rate  Economic uncertainty</p>

### **Searching strategy**

A rapid search for data that related to the Outcomes and Determinants Mapping (Appendix 1) was undertaken via:

Existing resources within the Centre: New Economics Foundation's Well-being evidence for policy a review, Legatum's Well-being and policy, and of course WWCW extensive catalogue of systematic reviews

- NLCF online evidence library
- Recommended papers (from wider project team and advisers)
- Focused search using Google Scholar for work available in the public domain

### **Evidence extraction**

A data extraction template was developed which outlined the sub-components across the three outcomes (Individual wellbeing; relationships and connections; people led). Evidence statements were extracted from each data source, as well as additional information on the level of confidence in the evidence (where already assessed through an individual study); whether the evidence statement linked to places and spaces; other factors that might influence the outcome – to inform WP2; and the interrelations with the other outcomes.

### **Evidence synthesis**

The evidence statements were synthesised to provide a narrative description of the findings in relation to each of the determinants and outcomes, where evidence exists. The initial findings were shared at a roundtable with staff from The Fund and academic advisers and the summary refined accordingly.

### 1. Objective and motivation

The objective of WP2 is to contribute new secondary research to the overall objectives of the research project, specifically:

- The factors (underlying conditions) and interventions (actionable) that contribute to thriving communities
- The inter-relationships between these factors and interventions, including evidence of patterns or sequencing and conditions for success

Specifically, we sought to look at predictors of ‘community-level social capital’ outcomes. These outcomes are mostly subjective measures that fit predominantly within the ‘Relationships and connections’ domain, and also within the ‘People led’ domain in the Fund’s strategic model.

This focus was chosen for three main reasons:

Firstly, for pragmatic reasons, as we had access to a large dataset which could be quickly analysed to address those particular measures.

Secondly, because WP1 revealed that there was a dearth of evidence on the determinants of these social capital outcomes. Or more precisely, there was a dearth of evidence regarding local-level determinants of these outcomes, with most research focussed on the individual level.

Thirdly, at a conceptual level we felt that these outcomes represent what is particularly unique to NCLF’s work and its strategic model, and which best capture a phenomenon which occurs at the neighbourhood or community level. Individual wellbeing is an integral part of NCLF’s work, but it is also the focus of the work of many other organisations, and is something that can be addressed at an individual level as well as at a community level. Good places and spaces are important to a community, but they are not often seen as objectives in and of themselves. Other outcomes such as economic conditions, health or education are all clear focuses of other NGOs and government bodies.

## 2. Data, Variables and Predictors Used

### Data Used

Our source of data for community-level social capital measures was Wave 6 (2014–16) of the Understanding Society survey. This wave includes modules focussed on local neighbourhood, political engagement and efficacy, social networks, volunteering, and group and organisation membership, all of which are relevant to the Fund's strategic model (see section below on outcome variables).

Using the geographical markers provided in the data set, we linked each individual to a set of neighbourhood and local authority-level variables that describe the context they live in. These variables were selected based on the Fund's strategic model, the literature review in WP1, and a review of local level indicator sets including Happy City's Thriving Places, Legatum's Prosperity Index, and the OCSI's Left Behind Index. Actual data was sourced from a range of places including the Office for National Statistics, NOMIS, and the IMD (Index of Multiple Deprivation). Details on the predictor variables can be found in the appropriate section below.

We then conducted a series of multilevel models to assess the independent contributions of the predictor variables for each outcome variable. Multilevel modelling is the methodology of choice in research of this sort, as it allows the inclusion of data at multiple levels, in this case at the individual level (e.g. individuals' reported levels of trust) and at a local level (e.g. unemployment rate in an area, or amount of green space). It is similar to standard linear regression techniques, which estimate the size and significance of the effects of multiple predictor variables on an outcome variable. The main difference is that it allows us to separate out individual-level determinants (e.g. an individual's age or income level) from local-level determinants and estimate how much of the variation in the outcome variable is explained by each. It also allows us to estimate how much of the variation in the outcome variable can be attributed to unmeasured local-level factors. While such models have been used extensively in the past to study specific determinants of outcomes such as social cohesion or local civic action, research has been rather scarce within the UK, and no studies have attempted to provide a comparative overview of a range of potential determinants.

We created a set of core predictor variables which were included as controls in all multilevel models, and then other variables were added one by one into separate models to assess their effects independently.

### Outcome variables

Table 1 lists the questions from Understanding Society which we used as outcome variables, and how they were combined into scales where relevant.

Table 1. Outcome variables and scales

Question	Code	Indicators mapping
<b>RELATIONSHIPS AND CONNECTIONS</b>		
I feel like I belong to this neighbourhood	f_scopngbha	Neighbourhood belonging
The friendships and associations I have with other people in my neighbourhood mean a lot to me	f_scopngbhb	
If I needed advice about something I could go to someone in my neighbourhood	f_scopngbhc	
I borrow things and exchange favours with my neighbours	f_scopngbhd	
I would be willing to work together with others on something to improve my neighbourhood	f_scopngbhe	
I think of myself as similar to the people that live in this neighbourhood	f_scopngbhg	
I regularly stop and talk with people in my neighbourhood	f_scopngbhh	
This is a close-knit neighbourhood	f_nbrcoh1	Perceived neighbourliness
People around here are willing to help their neighbours	f_nbrcoh2	
People in this neighbourhood can be trusted	f_nbrcoh3	
People in this neighbourhood generally don't get along well with each other	f_nbrcoh4	
How safe do you feel walking alone in this area after dark	f_crdark	Safe at dark
What proportion of your friends are of a similar age as you?	f_simage	Social network diversity
What proportion of your friends are of the same ethnic group as you?	f_simrace	
What proportion of your friends have a similar level of education as you?	f_simeduc	
What proportion of your friends have similar incomes to you?	f_siminc	
What proportion of your friends live in your local area?	f_simarea	Local friends
<b>PEOPLE LED</b>		
People like me don't have any say in what the government does	f_poleff4	Political efficacy
I am going to read a list of types of organisations. For each, tell me whether you are a member of an organisation of that type.	f_orgm or f_orgmt (count)	Group membership
Whether you are a member or not, do you join in the activities of any of these organisations on a regular basis?	f_orga or f_orgat (count)	Group activity
Including any time spent at home or elsewhere, about how often over the last 12 months have you generally done something to help any [local, national or international charity]?	f_volfreq	Volunteering

The first two scales (neighbourhood belonging and perceived neighbourliness) were simply created by recoding each item such that high scores indicate greater neighbourhood belonging and greater perceived neighbourliness, and then summing the relevant items. Whilst the two scales seem quite closely related, they were kept separate for two reasons. Firstly, they loaded onto two clearly defined separate factors in factor analysis. Secondly, one of the scales (neighbourhood belonging) was in the self-completion section of the questionnaire, which meant it was completed by fewer respondents. By keeping the two scales separate, we were able to maintain the maximum number of respondents for the perceived neighbourliness scale. The Cronbach's Alpha for neighbourhood belonging was 0.87, for perceived neighbourliness was 0.79. Over 0.8 is considered to indicate good scale internal consistency. Between 0.7 and 0.8 is considered acceptable.

The Cronbach's Alpha for the social networks questions was 0.5, which is considered poor or unacceptable.

Group membership and group activity were calculated simply as the number of types of organisation a respondent belonged to, out of a list of 16 organisation types.

### **Local level predictor variables**

Table 2 lists the predictor variables we considered in analysis. The variables listed as 'core model' were included in all models and treated as control variables. These are a combination of demographic variables and variables which have been demonstrated by other studies to consistently predict social capital outcomes.

The remaining variables were included each in separate models to assess their contribution without the risk of collinearity and complex models crowding out their effect.

Given differences in the data collection techniques in the four countries of the UK, we only used data from England. Note that different variables were available at different levels. The lowest level is the lower-level super output area (LSOA) of which there are 28,800 in England. The next level is medium-level super output area (MSOA): 6,791 in England. One indicator (charitable giving by Big Lottery Fund) was only available by ward, so this level was included in models including that indicator. Wards are roughly of similar size to MSOAs, but they are not contiguous – meaning models using wards could not also include data at MSOA level too. Lastly, we also included data at the local authority level (408 in England). It is fair to say that this is sub-optimal as local authorities are very large, and predictors measured at this level are likely to vary substantially within a local authority.

### 3. Methodology

To carry out the multilevel modelling, we used a mixed model with maximum likelihood estimation in SPSS. As well as the local level variables mentioned above, we also controlled for the following individual level variables in all models:

- Age (quadratic function)
- Gender (male or female)
- Marital status (single or not)
- Dependent children in household (yes or no)
- Highest educational qualification (No qualification, Other qualification, GCSE etc, A-level etc, Other higher degree, Degree)
- Job status (student/in training/apprenticeship, or self employed/ in paid employment/unpaid worker in family business)
- Ethnicity (White British, White Irish or Gypsy, any other white, mixed, Asian sub-continent, Black, other)

In some cases we simplified the categories included in Understanding Society. For example, for ethnicity three ethnic groups (Asian – Indian, Asian – Pakistani and Asian – Bangladeshi) were combined into one group (Asian – South Asia). We checked whether combining groups was valid by This kind of combination was verified by checking that there was not much variation in the scores for the constituent sub-groups on the neighbourhood belonging measure.

Below is the syntax for the core model for neighbourhood belonging:

```
MIXED sc_neighbour WITH f_dvage f_dvage_sq f_sex f_single_dv children households_dependentchildren
population_over65 median_adult_age income_score ethnic_diversity BY f_hiqual_dv jobstat ethnicity
/FIXED= f_dvage f_dvage_sq f_sex f_single_dv children households_dependentchildren population
over65 median_adult_age income_score ethnic_diversity f_hiqual_dv jobstat ethnicity | SSTYPE(3)
/METHOD=ML
/PRINT=G SOLUTION TESTCOV
/REGWGT= f_indscub_xw
/RANDOM=Intercept| SUBJECT(f_Isoa11).
```

We conducted 115 models – one for each combination of outcome and additional predictor variable, plus models just with the core predictors.

We also tested to see whether some effects were equally valid for different population groups using interaction terms and split file models.

Variable Source Year Level Justification

## Core model

% Households with dependent children	Census	2011	LSOA	Neighbourhoods with children and young families tend to a higher level of neighbourliness (Nasar & Julian, 1995 – cited in Buonfino, 2006)
% Population over 65	Census	2011	LSOA	Pensioners have more time to contribute to social capital in a community (Buonfino, 2006)
Economic deprivation	IMD	2012	LSOA	Neighbourhood disadvantage found to be related to low neighbourhood cooperation (Mennis et al., 2013), collective efficacy (Corcoran et al., 2018), and low social cohesion (Mennis et al., 2013; Wickes et al., 2019).
Ethnic fractionalisation (diversity)	Census	2011	LSOA	Frequently found to be harmful for social cohesion and collective efficacy (e.g. review by Meer & Tolsma, 2014; but see McKenna et al. 2018) Indeed almost every study considers ethnic diversity. Used Alesina et al. 2003 fragmentation index.
Rural Urban Classification	ONS		LSOA	High population density associated with lower neighbourhood cooperation and social cohesion (Mennis et al., 2013)
Unemployment Rate	Nomis	2014	LA	
Residential turnover	Census	2011	MSOA	Residential instability found to be related to low neighbourhood cooperation (Mennis et al., 2013), collective efficacy (Corcoran et al., 2018), and social cohesion (Wickes et al., 2019; Mennis et al., 2013)
Income inequality	ASHE	2014	LA	Some evidence that inequality associated with low social trust (Fairbrother & Martin, 2013)
Group / organisation membership	USS	2014-16	LA	
% Commuting 10-30km, or 30km +	Census	2011	LSOA	
Heritage assets	RSA	2016	LA	
% Green land cover	Professor Alasdair Rae	2012	LA	
Charitable giving by major funders	360 Giving	Ward: 2016 MSOA: 2011	Ward & MSOA	Want to see if and where spending by funders improves social capital
LA expenditure on community development	DCLG	2011-12	LA	Want to see if and where spending by local authorities improves social capital
Presence of social conduits (per capital) – restaurants, education and cultural spaces	UK Busines Counts	2011	MSOA	Research in Australia have shown that such ‘social conduits’ contribute to social cohesion and trust, and collective efficacy (Corcoran et al., 2018; Wickes et al.; 2019). In particular presence of chools associated with ‘sociability’ (Jupp, 1999, cited in Buonfino, 2006)
Proportion of businesses that are local enterprises	UK Busines Counts	2011	MSOA	Proxy for strength of local economy
Air pollution	IMD	2015	LSOA	Proxy for degree to which the area is dominated by roads and/or heavy industry which break up social fabric
Road traffic accidents	IMD	2015	LSOA	Proxy for degree to which the area is dominated by roads which break up social fabric
Journey time to key services		2016	LA	There is some literature which talks about the importance of the ‘cohesiveness’ of a place – i.e. does it have everything you need? Plus wanted to test the importance of public services

# FOOTNOTES

- 1 LSOA = Lower Super Output Area – average population 1500, MSOA = Middle Super Output Area – average population 7200, LA = Local Authority (District, Borough, Council area)
- 2 Age squared was included in the analyses so as to be able to model the fact that age’s relationship with the outcome variables may not always be linear. The fact that both age and age squared are often significant indicates that the relationship found was either an upside-down U-shape (i.e. rising and then declining with age) or, in the case of ‘local friends’, a U-shape (i.e. declining then rising with age)
- 3 Rurality was coded using a categorical variable with 7 categories.
- 4 Standardised effect sizes not reported where the relationship is likely to be endogenous  
understandingwellbeinginequalitieswhohasthepoorestpersonalwellbeing/2018-07-11 [Accessed 09.07.19]  
Pennington et al. (2017) Scoping review of review-level evidence on co-production in local decision-making and its relationship to community wellbeing. What Works Centre for Wellbeing (London) Available at: <https://whatworkswellbeing.org/product/scoping-review-local-decision-making-and-community-wellbeing/> [Accessed 09.07.19]  
Pennington et al. (2018) A systematic review of evidence on the impacts of joint decision-making on community wellbeing. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/joint-decision-making-briefing/> [Accessed 09.07.19]  
Pennington et al. (2019) Heritage and wellbeing: The impact of historic places and assets on community wellbeing – a scoping review. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/heritage-and-wellbeing-full-scoping-review/> and <https://whatworkswellbeing.org/product/heritage-and-wellbeing-briefing/> [Accessed 09.07.19]  
Stoll et al (2012) Well-being evidence for policy: A review. New Economics Foundation (London). Available at: [https://b3cdn.net/nefoundation/10b8aabd90c5771ff9\\_a0m6bvv5a.pdf](https://b3cdn.net/nefoundation/10b8aabd90c5771ff9_a0m6bvv5a.pdf) [Accessed 29.07.19]  
Tay et al. (2016) Debt and Subjective Well-being: The Other Side of the Income-Happiness Coin. Springer (Netherlands). Available at: <https://link.springer.com/article/10.1007/s10902-016-9758-5> [Accessed 09.07.19]  
Tomlinson et al. (2018) Visual art and mental health. What Works Centre for Wellbeing (London) Available at: <https://whatworkswellbeing.org/product/visual-arts-and-mental-health-briefing/> [Accessed 09.07.19]  
Van Willigen (2000) Differential Benefits of Volunteering Across the Life Course. *The Journals of Gerontology: Series B*, Volume 55, Issue 5, 1 September 2000, Pages S308–S318  
Victor et al. (2018) What do we know about tackling loneliness. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/tackling-loneliness-full-review/> [Accessed 09.07.19]  
Watson et al. (2018) Barriers to Learning. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/barriers-to-learning/> [Accessed 09.07.19]  
Watson, Tregaskis et al. (2017) Learning at Work. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/learning-at-work/> [Accessed 09.07.19]  
Watston et al. (2017) Adult learning. What Works Centre for Wellbeing (London). Available at: <https://whatworkswellbeing.org/product/adult-learning-briefing/> [Accessed 09.07.19]  
Wells and Pearson (2018) Progression to Employment: Lessons from the Talent Match programme evaluation. National Lottery Community Fund. Available at: <https://www.tnlcommunityfund.org.uk/media/insights/documents/progression-employment-summary-report.pdf?mtime=20190409094530> [Accessed 09.07.19]  
Wickes et al. (2019). Neighbourhood social conduits and resident social cohesion. *Urban Studies* 2019, Vol. 56(1) 226–248  
Williams et al. (2018) Ageing Better: Learning Report No. 2 – Community Connectors. National Lottery Community Fund. Available at: [https://www.tnlcommunityfund.org.uk/media/insights/documents/prog\\_fulfilling\\_lives\\_ageing\\_better\\_learning\\_report\\_2.pdf?mtime=20190408144001](https://www.tnlcommunityfund.org.uk/media/insights/documents/prog_fulfilling_lives_ageing_better_learning_report_2.pdf?mtime=20190408144001) [Accessed 09.07.19]